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GARDEN MAGAZINE & HOME BUILDER

Beauty Translated into Terms of the Practicable, the Possible; into Terms of your House, your Lawn, your Garden

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GARDEN MAGAZINE
& HOME BUILDER

Vol. XL, No. 1 SEPTEMBER, 1924

THREE PENNSYLVANIA GARDENS

Photographs by Mattie Edwards Hewitt

(See two following pages also)

GARDEN OF MRS. SAMUEL MORRIS
At Chestnut Hill

Sheltered and friendly and livable—one of Mrs. Ellen Shipman's delightful bits of artistry, so skilful and so finely balanced that one forgets the plan and is conscious only of the pervasive pleasantness of it all

GARDEN OF MRS. ROBERT GLENDENNING
At Chestnut Hill

Here are all the elements that any garden needs—peace, privacy, a comfortable place to linger and watch shadows and the play of gold fish in placid waters—and yet nothing that even a very small garden may not capture for its own

GARDEN OF MRS. J. FRANKLIN PEPPER
At Chestnut Hill

With its paved court, high fountain, jars, and potted plants somewhat reminiscent of the Old World yet transmuted by the breath of twentieth century America into something different and distinct, and endowed with an air of quiet durability rather rare in gardens on this side of the Atlantic

NEWS AND COMMENT

WITH this issue GARDEN MAGAZINE adds HOME BUILDER to its title and takes a departure from the somewhat restricted field of interest it has occupied for nearly twenty years. The garden maker and the home builder are to a very large degree just one individual and the fine art of gardening has its greatest expression in and touches most closely the hearts and souls of those who are home builders in the spiritual as well as in the material sense. Hence we are enlarging our sphere of interest and our fortieth volume marks the beginning of a practical recognition of an evident fact that the garden and the home are an indissoluble one in sympathy, appeal, and treatment. Hereafter, in additional pages of reading matter, the widened horizon will be embraced and home making is to be as constructively developed as garden making alone has been up to this time.

LIME AND LARKSPURS

EVERYONE, or practically everyone who has been gardening for any length of time, has attempted to include the Larkspur in the flower border. It insistently claims attention because it is practically the only upstanding blue flower of summer; but its habits and ways have not always been of the happiest. It is a victim of a strange disease—only too familiar to gardeners. The name Delphinium "blacks" is sufficiently descriptive to identify it. Remedies of one sort or another have been suggested and some kind of success has been reported from using lime-sulphur mixture. Some correlated testimony from different sources has led us to the thought that the real need of the Delphinium was not the sulphur but the lime.

In a recent contribution to the *Journal* of the Royal Horticultural Society a gentleman discussed his "Garden on the Chalk" soil of southern England, and a passing observation was made to the effect that on that chalk soil a great number of blue flowered plants seemed to be happier in growth with flowers brighter in color than when grown in another garden not on chalk. The idea set us thinking. In our gardens we noted that Plumbago planted on the rockery made of tuffa surpassed itself in beauty; also we recall the finest specimens of Delphinium that have come to our notice in western New York were in a notoriously lime-impregnated soil. And no diseases; no "blacks." The thought of the possibility of lime in the soil as the controlling factor preventing the "blacks" disease was passed on casually to interested inquirers and this season we have begun to receive reports from sundry parts of the country to the effect that on every occasion the "blacks" disease was ousted when lime was used freely in the soil. How much truth is there in this theory?

One correspondent was good enough to send in a detailed account of his experiments but unfortunately the letter containing his report has been lost or misplaced and hence we cannot give the details to our readers. If this gentleman will be kind enough to repeat his report, we shall feel greatly indebted. And may we also hear from others?

MORE "straws" to prove that the winds of popular fancy blow ever more strongly gardenward! The New York School of Fine and Applied Art offers this year for the first time a course in landscape architecture designed to meet the needs of the amateur and to stimulate his or her interest in reading and research along horticultural lines. And the announced reason for this novel addition to the customary schedule of art schools is "our universal interest in gardens together with the awakening of the layman to the fact that the home and its grounds form a unit." The course will be given Saturday mornings beginning September 27th under the able direction of Mr. Loutrel W. Briggs, a practising landscape architect of recognized position and a graduate of Cornell University. Further information may be obtained from the Secretary of the School, 2239 Broadway, New York City.

The Lowthorpe School of Landscape Architecture for Women at Groton, Mass., also announces "an intensive course for amateur gardeners the first three weeks in April." Special descriptive leaflets are supplied upon application.

THE cry of a "poor bulb crop in Holland" has got to be about on a par with the frozen peach buds in New Jersey and Delaware. Calamity has been so often called that the casual gardener is somewhat chary. Nevertheless, it would seem that this year the caution to place bulb orders early is really well founded. Advices tell us of a real bulb shortage in Holland owing not alone to poor crop conditions but also the fact that as the European countries are becoming more composed they are turning their attention to gardening matters and placing orders for bulbs in large quantities, especially Germany. The late comer this year stands a very good chance of having to take just what he can get, and be thankful at that!

SIR HARRY J. VEITCH, V. M. H., the great veteran horticulturist who died in England on July 6 in his 84th year, has left a record of achievement that will bear fruit in our gardens as long as plants are grown. Among the multitude of introductions by the concern he long directed the so-called "Boston Ivy" (Ampeopsis Veitchi) is but one that happens to bear that distinguishing firm's name. Sir Harry was for more than a half century a dominating personality in European horticulture.

DAHLIA SHOWS THIS MONTH

THE most important, naturally, of all the month's gathering in the East is the Ninth Annual Exhibition of the American Dahlia Society at the 71st Regiment Armory, New York City, Sept. 23, 24, 25.

A move to more commodious quarters was imperative, and with ample space now available this gathering may take on the nature of a general late summer show. Pacific Coast interests will center in the Ninth Annual Meeting of the Dahlia Society of California, Palace Hotel, San Francisco, Sept. 4, 5, 6.

Other dates of which we have advice are: Short Hills, N. J., 16th Annual Show, Sept. 26 and 27; Monmouth Co. Horticultural Society, Red Bank, N. J., 28th Annual Show, Sept. 11 and 12; Dahlia Society of N. J., Trenton, Sept. 21 and 22; New Haven, Conn., Sept. 16 and 17; Hazleton, Pa., Garden Club Aug. 27 and 28; Plainfield, N. J., Garden Club Sept. 27; Westfield, N. J., Garden Club, Sept. 30; Horticultural Society of New York, Sept. 19, 20, and 21; Boston, Mass., Sept. 13 and 14; Sewickley, Pa., Oct. 1, 2, and 3.

THE season of 1924 will long be remembered for its Rose splendor. The continued moderate temperature and overcast skies of the spring and summer spelled out a combination peculiarly favorable to the endurance of the bloom. Notwithstanding popular belief, the actual precipitation of rain was below normal, nearly 15 per cent. in fact, as we approach the end of July. For all this, as rosarians we are truly thankful. Records will indicate that the pestiferous rose bug has been less than usual in evidence, but whether due to greater vigilance or lessened attacks we dare not venture to say. Certain it is that proprietory remedies have been pushed vigorously by their makers and continued vigilance is the price of success. The gardener must ever bear in mind that the poisons are effective only as they actually hit the beetle. In view of divergent opinions as to their efficacy the rose grower must realize that very essential fact.

A GAY PATTERN OF PARROTS, TULIPS AND CHERRY BLOSSOM

"A bedroom with few pictures may achieve a good deal of cheer and distinction from a well designed wall-paper which sets the key-note of the color scheme" (Detail of this paper on page following)

WHERE WALL-PAPERS BELONG

AMY RICHARDS COLTON

Decorator, Author of "Choosing Chintzes for Sun-room and Veranda," May, 1924, G. M., and other articles

Photographs by Kenneth Clark, Mattie Edwards Hewitt, and by courtesy of W. H. S. Lloyd & Co.

Garden Motives and Where They Go Best — Choosing Patterns for Their Cheer and Plain Surfaces for Their Peace — Suitable Papers for Bedroom or Sun-porch

NECESSITY appears to have been the mother of invention in the making and use of wall-paper. From the earliest civilized times, particularly in the cooler countries, some covering was sought for the walls, first as a shield from draughts and dampness, later—when houses were better built—for decorative purposes.

The earliest wall coverings in Europe were woven ones of many kinds: damasks, oriental rugs, linens, tapestries—all came into play. In Italy wall hangings must have chiefly satisfied a desire for color and pattern, as the marble or plaster walls were well built and the climate reasonably mild; but north of Italy, where cold, dampness, and draughts prevailed for part of the year, the heavy tapestries contributed bodily warmth as well as aesthetic values, while their varied and interesting designs told as many ancient tales as the wandering minstrels.

This was all very well for the rich nobles who could afford expensive hangings, but far beyond the reach of the poor who were still

GENUINE ANTIQUE CHINESE HAND-PAINTED WALL-PAPER

Such papers were first brought to Europe by early navigators of the 17th Century and were used in France as wall panels in the manner shown above. The choice of 18th Century French furniture helps to create a true replica of this bygone continental period (Courtesy of Miss Nancy McClelland, Decorator)

shivering in damp, dreary hovels. Time went on however, the feudal age passed, and a middle class developed. Even the lower classes began to hold their heads up and long for a few creature comforts, chief among them being the desire for warmer, and less draughty and dreary homes. Out of this longing the first wall-papers grew.

They were in fact originally used in the 16th Century by the less well-to-do classes. The rich aristocracy preferred their beautiful woven hangings, for tapestry weaving was still in its glory.

THE early wall-papers were painted by hand on small sheets of paper, and do not appear to have been matched to make a repeat and were either used as separate panels or pasted side by side as they came, without the idea of a continuous pattern. These early papers were peddled from door to door and it is hard to tell at this late date in which country they originated. They seem to have been used throughout civilized Europe at about the same time.

The earliest designs extant were taken from damasks or had heraldic motifs, and it seems safe to say that the eastern countries supplied most of the inspiration for the designs of wall-papers as well as of printed cottons. Contemporaneously with the early patterned papers was an almost plain kind that resembled those marbled papers which were employed still earlier to line the covers of books. These marbled effects came first to Italy via Persia, and so spread throughout Europe. The Italian craftsmen were called domino makers, and later from them a guild of that name developed.

Wall-paper being so perishable and always comparatively cheap, few fragments of the earliest kinds have been preserved. Sometimes, by chance, wood panelling was built over a wall already covered by paper. and in this way stray specimens of the 16th and 17th Centuries have been preserved to us.

During the 17th Century the merchant class increased in power and wealth and by that time the early navigators of the 17th Century had opened the way to a steady and profitable trade with the near and far eastern countries. Returning merchants, trading with China, brought as mementoes Chinese hand-painted wall-papers, used at that time in northern China. These were in small unmatched sheets, as in the early European wall-papers, and from having at first been mere curiosities, they were adopted for practical purposes on the walls of many of the prosperous merchant families.

Before long they became the fashion and the most fastidious people took to them furiously, laying aside their old-fashioned wall hangings.

All this came about during the reigns of William and Mary and of Queen Anne, and so on down through the Georges, and was contemporaneous with the craze for India prints, Chinese porcelains, lacquer cabinets, etc.

Doubtless the returning merchants had an appreciation of the intrinsic and aesthetic value of these things, but there must also have lingered about them the romance of the East a touch of the adventurous part of their own lives brought back to their solid European homes.

Although the original European and Chinese wall-papers were hand-painted, it was not long before blocks were cut to print the outlines from, these being filled in later by hand in tempera. From this it was a short step to cutting complete blocks from which to print the entire paper. These in time gave way—except for more choice scenic papers—

The picture on preceding page shows the pleasant effect of this paper in an appropriately furnished bedroom in a country home

Modern rendering of one of the amusing old French Toile de Jouy designs

The Chinese influence is persistently felt in all branches of decorative household art and gives us such highly toned papers as the one shown below

TWO EFFECTIVE AND WHOLLY DISSIMILAR TYPES OF HALLWAY PAPER

Scenic paper with brilliant colors enlivens the colonial entrance hall at the home of Mrs. Wm. M. Ritter, Manchester, Vt. (upper picture), and a "banana leaf" foliage paper in soft tones of grey-brown enriches the stairway of Mr. Donald Scott's house at Coldspring Harbor, L. I.; Richard H. Dana, Jr., Architect

to the metal rollers from which so many more yards could be printed in a given time, thereby lowering the price to the needs of the humblest family.

AFTER the early crude ones, wall-papers resolved themselves into various classes: scenic papers with no repeat, taking the place of decorative wall paintings and often designed by great artists; large floral and bird patterns that do not repeat often, derived from original India prints or Chinese paintings; small diaper patterns or repeat floral patterns; patterns derived from damasks, foliage motifs, architectural designs, imitations of leather, plain papers, variations on these themes in the way of texture (flocks for instance) and combinations of different varieties.

The 18th and early 19th Centuries were the finest periods of European wall-papers and during the one hundred and fifty years many of the best artists of their time designed superb sets of scenic papers, decorating them by hand in the earlier days. The finest of all were created in France, where they may still be found on the walls of many a forgotten country house. Occasionally sets are carefully removed from the original walls and come to this country, and around such a set a very interesting room can be built, shedding some of the glamour of the old French country life. Combining these sets of papers with the graceful but simple French country furniture produces an effect of a simplicity and charm which those who think of French interiors only as one sees them at Fontainebleau or Versailles never dream of.

From this it may be seen that any simple country house with 18th or early 19th Century feeling in it can appropriately be done throughout in wall-paper, and where the other furnishings are in harmony a fresh homelike quality is easily created. Personally I do not get great thrills from a house done in wallpaper; on the other hand there is charm, crispness, and to those who respond to it, a sense of cheer, which houses on more stately southern European lines entirely lack.

But in spite of all that can be said in its favor when used appropriately, it cannot be denied that first and foremost wall-paper came about for utilitarian reasons and developed decoratively as an outgrowth. To this day it is often chosen primarily because it is the quicker and sometimes less expensive way of attaining a desired result.

THE devotees of wall-paper may insist that the plain papers with texture surpass other plain wall surfaces, but this is only because the hand finished, trowelled surface is more laborious and costs more. Again the same advocate may insist that there is nothing to compare with a fine scenic paper to decorate the walls of a house of the same period as the paper, which in one way is quite true; but the fact remains that originally the printed papers from wood blocks were novel substitutes for more expensive wall painting and frescoes, done by famous artists for individuals and not repeated.

Wall-papers are a quick and easy way to obtain a satisfactory plain or decorated background, and for this reason will probably always be used by the average family. This being granted, it becomes most important to preserve the traditions of the finest wall-paper periods; and that competent artists, understanding these traditions and something of architecture, should design the patterns; that the mechanical process should follow, as faithfully as modern conditions will permit, the old ways which prevailed when wall-paper was a minor art. In our modern life the rooms in which patterned wall-papers seem most appropriate and mentally wear the best are, paradoxically, those in which one lingers least and does the least thinking in; for the reason that, except in the case of the finer non-repeat scenic papers, one cannot help being eventually irritated by constantly watching an endless repetition of motifs, no matter how charming and well designed. Unconsciously one begins noticing where the repeat begins and ends, and cursing the ingenuity of it.

On the other hand a bedroom with few pictures may achieve a good deal of cheer and distinction from a well designed wall-paper, which sets the key-note of the color scheme, because in this room one does not expect to linger many hours a day. For a bedroom in which one was to have a long illness one would hope to have at least selected one's own wall-paper!

FLORAL patterns, their scale depending on the size of the room, suit a bedroom best, unless one wishes to hang pictures; in which case stripes, small diaper patterns, or plain papers, are better. Borders, if well designed in a thoroughly conventional way, make a nice binding for a plain or striped paper in a bedroom, between the walls and ceiling. Unfortunately few borders of the slightest distinction seem to exist to-day, and this is a field the paper manufacturers might well look into. The hideous naturalistic so-called "cut-out" borders seem fortunately a thing of the past, but there is a need of narrow well designed borders to use with plain papers, and there are plenty of good models of the past to draw upon.

In a simple country house where the ceilings are low a striped paper will help the hall by apparently lifting the ceiling; but where the ceilings are higher a good verdure or 18th Century scenic paper gives a sense of space and breaks the monotony of walls where one does not expect to hang pictures. In the types of house where wall-papers are suitable, a hall is seldom more than an enlarged and glorified passageway in which one does not expect to linger long enough to be irritated by the continuous expanse of the same scene.

A morning room or boudoir is a perfect place for a flowery paper of the India print family, and if the pattern is not too large and striking one can still use judiciously chosen prints, framed in gold or black, on the walls. Plain glazed chintz curtains, formally made and with gilt valence boards; a few choice pieces of black and gold lacquer; the balance of the furniture Queen Anne in walnut; and a plain rug—this should make a charming and livable room.

THE only papers that seem to me possible in a living room or library are the plain ones with a texture—especially the stipple variety which approximates a "glazed" painted surface. There are too many miscellaneous objects in such rooms to be assimilated against a figured ground, and in a library especially, one seems to prefer the company of a few good pictures or prints against a plain wall as an accompaniment to one's books and thoughts.

For a formal drawing room a period paper of some sort may be chosen, possibly a scenic one set in panels. This gives a chance for some plain spaces as a relief from too much pattern, and for an architectural structure in a room that calls for a formal arrangement.

An enclosed sun room is a chance for a more nearly naturalistic scenic paper of the early 18th Century type, with plenty of color and landscape effects, including sky. It acts as a link with out-of-doors, and if on a fairly large scale, it makes a suggestive background for the potted plants, aquariums, and gaily colored birds in fantastic cages which people love to have about them in a northern winter. This kind of sun room is peculiarly northern, for obviously paper can only be used in an enclosed room where the dampness does not penetrate. Still if the paper is varnished or shellacked it becomes more weather proof, and has a softened and less insistent background. Bamboo or painted furniture can be used, with a rush rug on the floor and curtains of a plain sunfast material.

WHETHER a dining room paper is to be plain or figured depends on whether there are pictures to be hung there or the paper is to form the decoration. Any of the plain stipple papers in a neutral warm tone make a good background for paintings, and in this case a screen may be covered with an interesting pictorial paper, shellacked, and toned to give a mellow look. Where the paper is to form the decoration a copy of one of the old hunting papers set in panels or going around the room without a repeat is very delightful. It may be combined with walnut or oak woodwork, and the windows relieved by red or gold curtains. With the plain paper an Oriental or Chinese rug might be used; with the hunting paper, a plain neutral rug.

From the earliest times to our own, the favorite wall-paper motifs have been floral, scenic, or foliage and scenic combined; and even those that appear to have been copied from fabrics have flower forms highly conventionalized as a basis for the patterns. With wall-papers as with chintz, the artists and designers of bygone days and of our own have turned to nature and to the garden for their inspiration in designing the ingenious and interesting patterns that enliven our walls and windows.

Kenneth Clark, Photo.

A WELL CHOSEN REPEAT PATTERN WITH CONVENTIONALIZED GRAPE MOTIF

"With wall-papers as with chintz, the artists and designers of bygone days and of our own have turned to nature and to the garden for their inspiration in designing the ingenious and interesting patterns that enliven our walls and windows." Paper in three shades of gray with touches of blue and plum-color in grapes and cups; writing room at the home of Mrs. William M. Ritter, Manchester, Vermont; Richard H. Dana, Jr., Architect

SUCCESS IN THE HARDY GARDEN

ELIZABETH LEONARD STRANG

Landscape Architect

Author of "What Shall My Garden Cost?" (Jan. 1924, G. M.), "Shrubs and Flowers for the Friendly House Front" (Apr. 1923, G. M.) and other articles

Tested Plants and the Making of a Plan—Arranging for Color, Height, and Seasonal Succession—Emphasizing Corners and Gaining Diversity by Alternating Forms

THEORETICALLY, a perennial garden gives bloom from early spring to latest fall, in a succession of pleasing pictures. But actually, does it?

Passing over carpet bedding of bulbs or annuals, suitable only in special instances, "herbaceous planting" as we have come to understand the term was first introduced in the Elizabethan gardens of England. It consists of the intermingling of hardy perennials in graceful masses, so arranged as to completely cover the soil, and to soften by their irregularity the hard edges of walls and walks; and, moreoever, so artfully arranged as to provide bloom at each season in turn, leave no empty places, and give a variety of color, height, and form. It may be easily understood that the successful development of such a scheme means almost infinite study of detail but there are certain fundamental principles that form the general foundation.

THE CHOICE OF PLANTS

AT EACH season some one important flower should dominate throughout the entire garden. At Iris time it should seem to be full of Iris; at Phlox time there should seem to be nothing else. This means that the size of the masses and their interposition is such that the fading of each dominant flower leaves no large empty space, each kind being repeated at intervals all over the garden.

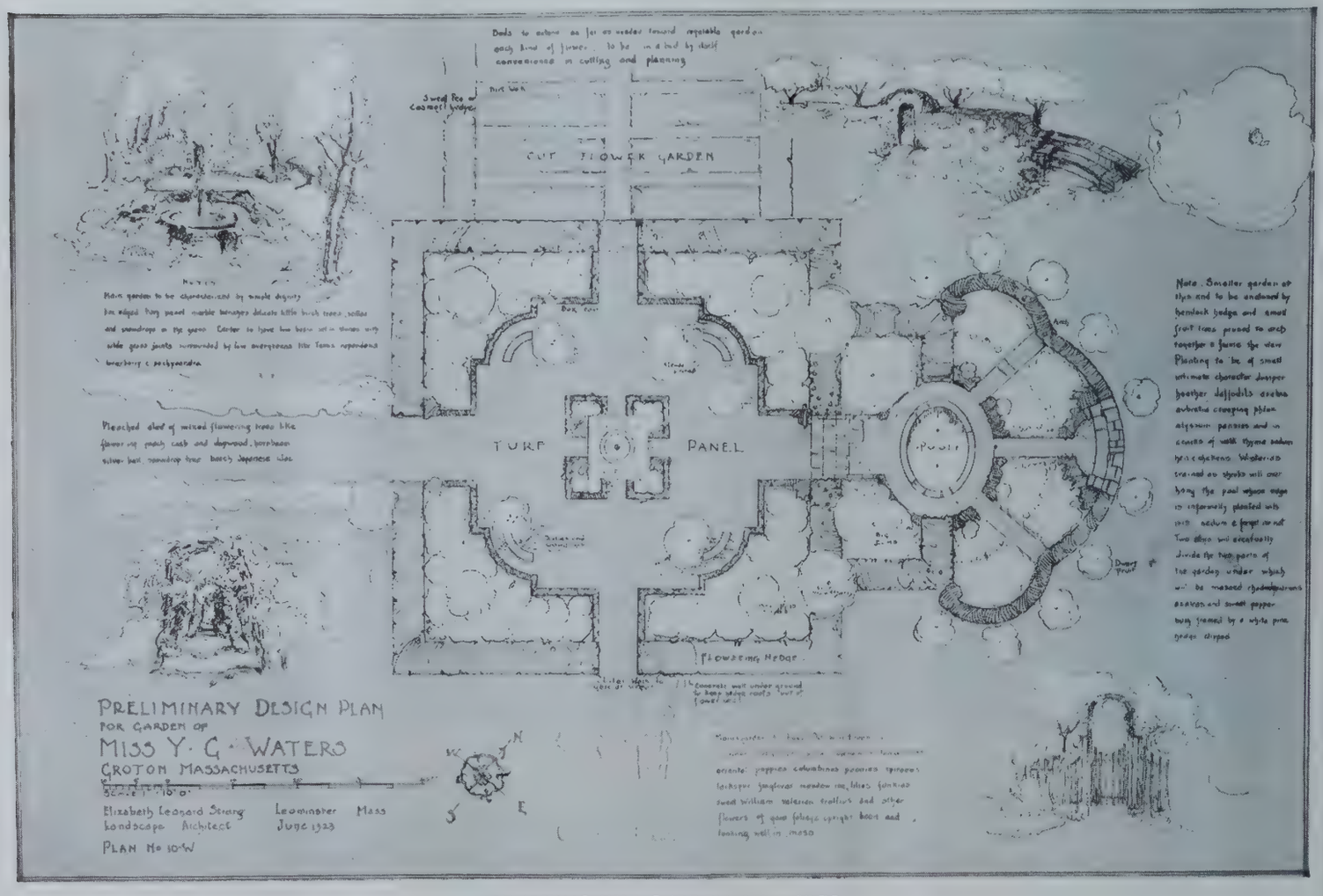
Plants are not all of equal merit and must be considered accordingly, but a few there are that seem to be of unusual importance. Certain indispensables worthy of dominance (classified by season below) practically every garden has, though there are always special limitations and conditions imposed which make each problem interesting in itself.

THE LIST OF IRONCLADS

SPRING: Narcissus, Early Tulips, May-flowering Tulips, Iris. *Admitted with qualifications:* Columbine, Common Pink (or hybrid if masses are large).

EARLY SUMMER: Peonies, Larkspur, Hollyhocks, Japanese Iris. *Admitted with qualifications:* Foxglove, if massed and in partial shade, Pyrethrum, and Campanula persicifolia, if they like the soil.

MID-SUMMER: Phlox. *Admitted with qualifications:* Anthemis, if staked erect, Gypsophila, for certain effects.



STARTING THE GARDEN ON PAPER

Such a skeleton plan drawn to scale and showing the general outline and chief groupings is an invaluable aid in achieving a satisfactory finished effect. By courtesy of Mrs. Strang blueprints of the central garden, outlined above, giving detailed list of varieties, number of plants, their arrangement, etc., may be had (at nominal cost) on application to the Editors

A HARDY GARDEN PLANNED FOR ALL-SEASON EFFECT

View of the oval garden shown in the sketch below, designed for Mr. George Mabbet of Plymouth, Mass., by Elizabeth Leonard Strang, L.A.

AUTUMN: Hardy Asters, Chrysanthemums. *Admitted with qualifications:* Japanese Anemones, if hardy, or protected; Boltonias, if you have room; Helenium, in large garden.

Let it be here said that the foregoing list was not taken at random from the various ready-made lists now so generally available but is a real "hard-boiled" one evolved after years of repeated trial in planning and planting gardens.

SECONDARY LIST OF GOOD THINGS

FOR combination with the foregoing list of ironclads is a larger number of plants good, but yet not worthy of first place. Many more might be included but the following are typical.

EARLY SPRING

Tall: Doronicum, Hyacinth, Crown-imperial, Bleeding-heart, Globeflower.
Medium: Iris pumila, Forget-me-not, Iceland Poppy, Grape-hyacinth, Fritillary.
Short: Anemone pulsatilla, Crocus and other small bulbs, Arabis, Alyssum saxatile, Viola.

SPRING

Tall: Anchusa, Polemonium caeruleum, Iris Sibirica, Lupin.
Medium: Columbine, Phlox divaricata, Iris intermediate, Dictamnus, Mertensia.
Short: Veronica rupestris, Phlox subulata, Polemonium reptans, Pink, Iris cristata.

EARLY SUMMER

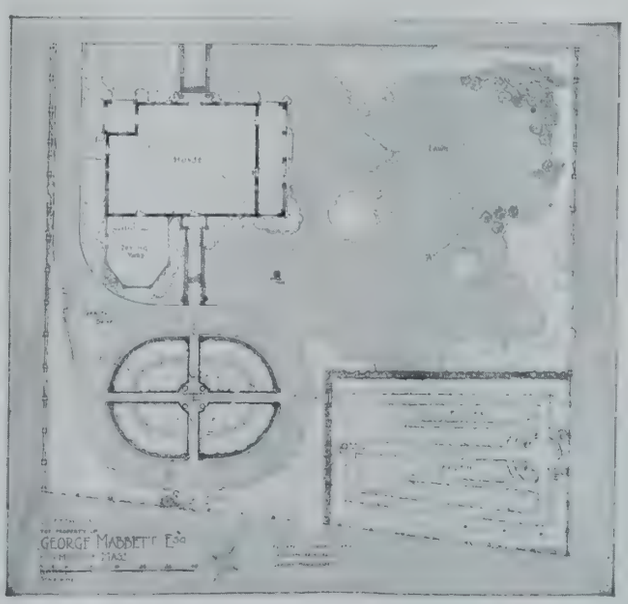
Tall: Valerian, LemonLily, Oriental Poppy, Thermopsis caroliniana, Siberian Meadowsweet, Clematis recta, Thalictrum aquilegifolium, Lythrum roseum superbum, Lilium regale, Madonna Lily, Lilium testaceum.
Medium: Linum, Astilbe, Sweet William, Blue Plaintainlily, Phlox Miss Lingard.
Short: Cerastium, Nepeta Mussini, Tunica, Gypsophila cerastioides, Coral Lily, Hemerocallis minor, Milkweed, Lilium elegans.

MIDSUMMER

Tall: Eryngium, Echinops, Cattail Gayfeather, Chrysanthemum uliginosum, Lilium Henryi, Tiger Lily, Goldbanded Lily, Monkshood (tall vars.), Artemisia lactiflora.
Medium: Hosta lancifolia, Lilium canadense, Platycodon, Veronica spicata, Veronica longifolia subsessilis, White Plaintainlily, Eupatorium urticaefolium, Speciosum Lily.
Short: Campanula carpatica, Coral-bell, Oenothera missouriensis, Phlox Tapis Blanc and Frau Anton Buchner.

AUTUMN

Tall: Salvia azurea grandiflora.
Medium: Speciosum Lily, Sedum spectabile, Eupatorium coelestinum, Statice latifolia.
Short: Plumbago.



AN OVAL BREAKS SPACE INTERESTINGLY

Almost any one will find some helpful suggestion from such a carefully thought out treatment of a moderate-sized property and, by courtesy of Mrs. Strang, detailed planting lists of the oval flower garden are available to the reader (at nominal cost) on application to the Editors

ARRANGEMENT FOR COLOR

COLOR harmony, as a matter of plain practical fact, generally takes care of itself, provided glaring reds or magentas are omitted and the plantings confined to clear tints, avoiding muddy browns and tones which may be interesting in detail but poor in the mass.

If desirous of acquiring facility with a working vocabulary of plants from a color standpoint, the garden planter might make a set of six cards divided as to season and height as above, taking one card for each of the following color groups: scarlet and orange; yellow; white; blue; violet and purple; crimson; pink and maroon. And then in starting, play safe, using only the clear soft colors, and as you gain in experience you can become more daring, with orange, cerese, and cobalt blue.

The lists are variable, differing of course for each individual garden, according to the fancy and needs of the owner. One person may wish to emphasize spring, and want nothing for midsummer; another may desire the best effect in the fall. One may want a fragrant garden, or a Phlox-less garden; or perchance dislikes purple, or prefers pink—and so on. And the lists must be built, accordingly.

Though we may vary the rule for the sake of informality, yet generally speaking the tallest plants (mingled early and

late) go next the boundaries or the centers of the largest beds. Medium-sized plants like Phlox, which are effective only in large masses, occupy prominent positions near the central line of the border. In front of them are things of the size of Iris and Peony. The extreme front is reserved for the creeping and prostrate plants, which hide bare stalks and mask sharp edges. This arrangement automatically brings the spring border plants to the front, and tall spreading autumn plants to the back, with midsummer plants intermediate. Bearing these general facts in mind the seasonal distribution may be varied by a judicious disarrangement of the heights.

PLACING THE DOMINANT PLANTS

WITH the available material listed as described above we come to the actual arrangement of the plants on paper. Start with an outline drawing of the garden, on a scale not smaller than one-fourth inch to the foot—a three-eights scale is even better—and proceed to compose the border in this wise: First for the skeleton or framework mark in the woody or shrubby plants such as a Box edging, any evergreen accents, or an Oleander in a tub at a salient point; or, to break a too rigid formality, irregularly disposed specimens of Flowering Crab, Lilac, Almond, or Harison's Yellow Rose.

Next place the Peonies because, when established, they are seldom moved, and are as vigorous as shrubs. Allow a three-foot circle for each plant, and distribute singly or in groups of three. Next mark in the Iris, in groups of from five to ten, spaced eight inches apart.

The Phlox is in masses of from six to a dozen plants, say, fifteen inches apart, of one color, or a combination. (It is, of course, proper at this stage to choose the best of the named varieties, though we need not go into such a complex subject here.) Some gardens will be designed to have a dominance of one flower, some of another, and some method of checking up the plan at this stage of progress, by cross-hatching or water-color, will prevent the use of too much of one thing, or the omission of a dominant group at some vital point.

The next step is to put in the taller plants, like Larkspur, Hollyhocks, and Hardy Asters. Bear in mind that though it occupies but one square foot in the spring, a single hardy Aster plant will spread over many feet when in bloom, so use relatively few of them. Plant Hollyhocks where they can have a suitable background. Lythrum roseum tones down their lanky stalks. Never can there be too much Larkspur; but always plan for something to bloom with it, like Roses on near-by supports, Lilies, or early Phlox.

USING YELLOW AS ACCENTS

HAVING proceeded thus far, look to the distribution of the yellow flowers. Yellow should be used sparingly, in carefully placed accents, since it is by far the most prominent color in the garden. The following will provide flashes of yellow throughout the season:

Crocus, in patches of ten to twenty-five.
Early Tulip Chrysolora, not more than six.
Daffodils, in clumps of six or a dozen.
Late Tulips Bouton d'Or or Moonlight, from three to six.
Alyssum saxatile, in twos and threes.
Early Lemon-Lily (Hemerocallis flava) } mixed.
Late Lemon-lily (H. Thunbergii) }
Globeflower, lemon colored
Oenothera Youngi, a very little to the front as it is vivid.
Oenothera missouriensis, prettier and later than foregoing pale primrose.
Coreopsis grandiflora, a very little.
Anthemis tinctoria, clumps of three, tightly bunched.
Very late Lemon-lily (Hemerocallis citrina hybrids).
Helenium autumnale, preferably just outside the garden.
Chrysanthemum Baby, a button flower, at least six in a clump.

BRIDGING THE JUNE AND JULY SLUMPS

THERE are two critical times in the garden. One is just after the Tulips and Iris are gone, before the coming of the Larkspur and its attendant flowers. The other is after the passing of the Larkspur, when the garden often degenerates to a weedy mess before the Phlox comes to the height of its glory, and special consideration must be given to the plants for those periods.

For the June slump: First choice, Blue Perennial Flax with pure white Cerastium to face, and late yellow Columbine (Aquilegia chrysantha) in the background. *Second choice,* Pinks, white or rose; Maiden Pink (Dianthus deltoides), vivid deep rose; Saponaria ocymoides, pink.

For the July slump we have a still greater variety, though but one or two things are necessary to any one. *First choice,* Japanese Iris, all clear lavender, or all pure white, Early white Phlox Miss Lingard, Gypsophila, white or mist-grey effect; False Dragonhead, pink or white; Shasta Daisy, white; Lilium Hansoni, deep gold. *Second choice,* Anthemis, the yellow Daisy; Coreopsis grandiflora, a very little as it is in bloom so long; Pearl Achillea, only one square foot to a plant as it spreads like witch grass; Tawny Day-lily (Hemerocallis fulva), with Lychnis chalcedonica, scarlet; Bee-balm, red for an isolated position against green.

WHERE TO TUCK IN BULBS

NOW, theoretically at least, every spot on your paper plan is planted with something. Yet actually, on the ground there will be space between the plants. This affords a chance to use bulbs and annuals. The plan becomes altogether too complicated if you attempt to show these together with the perennials. It is possible to place a piece of tracing paper over the perennial plan and fit in the bulbs, but actually no such elaborate method is necessary.

First, buy your bulbs, quantity to depend on your purse, but remember that too many in a perennial border look worse than too few, since there are other things to reckon with. Having bought your bulbs take them out into the garden and proceed to lay them on the bare ground, evolving your color scheme and plan as you go. Then, when all is done, plant them. Really, it is as simple as that!

Plant clumps of Crocus at irregular intervals around the central circle. Have stretches of blue Grape-hyacinths and white Checkered Fritillaries for the effect down a minor path, or white Grape-hyacinths over pink creeping Phlox somewhere else. Put clumps of Daffodils near a Forsythia or against evergreens. Each Peony may have a clump of early Tulips beneath it. Face the main walk with drifts of pink early Tulips deepening to rose at the center. Similarly, with the May-flowering Tulips have a concentrated effect of pink Darwin Clara Butt in the garden's heart shading off at the far edges to clumps of rose, shaded orange, cerise, and crimson. One walk may be devoted to combinations of violet and gold, another to orange and brown. In a small garden, choose between a combination of pale pink Hyacinths and purple Crocus, or pale blue Hyacinths with Daffodils; do not try to have both or the unities will suffer.

Though you do not leave deliberate spaces on the plan for bulbs (for there is always room to stick them in), yet it is well to keep in mind the colors of the Iris when distributing the bulbs. If your pink Tulips are concentrated around the center, have lavender Iris there. For example, put Tulip Picotee with Iris Madame Chereau, as one is edged with pink, the other with blue. Use a pearl-colored Iris with a Tulip of vivid flame, a pale sulphur Tulip with a purple Iris, and vice versa. Make your flowering trees contribute to the picture in bulb time. Remember to place the lavender Tulip Erguste near the pink Flowering Almond; rose-colored Centenaire Tulip beneath the Lilacs, and so on.

SPECIAL EXPEDIENTS AND COMBINATIONS FOR ADDED BLOOM

IF THE perennial border has been properly designed, it should not be necessary to resort to annuals in order to secure a succession of bloom. Nevertheless like spice in a pudding, the garden is the better for their use. As in the case of the bulbs, annuals are never deliberately planned on paper, except in a broad general way, easy for the inexpert helper to comprehend.

The first year, however, it will be well to turn to special expedients for a quantity of bloom, and here the annuals are particularly useful. For instance, sow Poppy seed (Shirley or Dreer's Single Mauve) between all Iris roots; sow Zinnia (dwarf double salmon-rose) over Oriental Poppies.

Remove Sweet William, Foxgloves, and Canterbury-bells after blooming and fill in with annuals for special effect, using orange Marigolds, Calendulas, and dwarf Ageratum, or Schizanthus and maroon Scabiosa. Fill with early Cosmos after the Larkspur is cut down.

Remove Tulips after blooming and fill the spaces with masses of dwarf pink Snapdragons and Heliotrope. Sometimes Tulips are placed in broad patches to allow for just such filling.

Plant the entire length of both sides of a long walk with orange Calendulas in groups of three, alternating with lines of dwarf Ageratum, or use Mignonette faced with shell-pink annual Phlox, and clumps of sulphur Gladiolus.

Near coral Phlox fill with lavender Salvia farinacea and lemon Marigold. Near lavender Phlox use orange African Marigold and purple Gladiolus.

For general background use a combination of tall rose Lavatera, Argemone, clumps of Gladiolus primulinus, and Scabiosa Azure Fairy.

In shady spots use Nicotiana hybrids, rose and pink.

Near purple Asters use lemon color Dahlias, or a combination of deep rose Gladiolus Mrs. Watt and purple Baron Hulot.

Plant summer Hyacinth (Galtonia candicans) to flower after Foxgloves.

THE IMPORTANCE OF KNOWING YOUR PLANT

THEORIES and directions will avail nothing in the making of a border if you do not know your plants, for they constitute your working vocabulary and without a knowledge of them you are helpless. As you learn, you will compile working lists of which the following are typical:

Good Corners, Strong Foliage: Plantainlily (Hosta), Coral-bells, Iberis, Saxifraga cordifolia, Peonies, Dictamnus, Arabis if cut back, Baptisia australis.
Foliage Weak, Or Shabby After Bloom: Bleeding-heart, Clematis recta, Herbaceous Spireas (Astilbe), Mertensia, Oriental Poppy, Veronica.
Spikes for Accent: Foxgloves, Japanese Iris foliage, Eryngium, Gayfeather, Iris sibirica, Echinops, Plumepoppy, Hollyhock, Monkshood.
Softly Rounded Masses: Galium molluga, Tunica saxifraga, Gypsophila cerastioides, Statice latifolia, Baby's-breath.
Good Whites for Combination: Arabis, Clematis recta if staked, Eupatorium urticaefolium, Pearl Achillea, Cerastium, Gypsophila, Chrysanthemum uliginosum, Meadowrue, Artemesia lactiflora, Cimicifuga simplex.
Gray Foliage for Toning Down: Arabis, Artemesia stelleriana, Echinops, Veronica incana, Cerastium, Lavender-cotton, Eryngium, Nepeta Mussini, Lavender, Pinks.
Quick Foliage in Spring: Bleeding-heart, Tulips, Clematis recta, Meadowsweet, Narcissus, Mertensia, Arabis.
Not Good the First Year: Peonies, Dictamnus, Iris (usually), Platycodon, Wild Indigo, Milkweed.
Not Permanent, Need Renewing Often: Most Lilies, except Tiger, Regal, and tenuifolium; Branching Forget-me-not (unless it self sows), Sweet William (easily renewed from seed), Nepeta Mussini (not very hardy), hardy Chrysanthemums (not very hardy, dislike crowding), Platycodons (often hoed up in spring), Mertensia (often hoed up in spring), Oenothera Youngii, Iceland Poppies, Violas (often winter-kill), Foxglove (unless it self sows), Japanese Anemones (not very hardy), Anchusa, Shasta Daisy, Lupines, Campanula persicifolia.
Fragrant Through Season: Hyacinth, Lily-of-the-Valley, Madonna Lily, Heliotrope, Tulip Gesneriana lutea, Iris florentina, Mexican Tuberoses, Mayflower Verbena, Violets, Lemon-lily, Mignonette, Speciosum Lilies.
Good the First Year: Anthemis, Shasta Diasy, Veronica, Iris (only fair), Phlox (only fair), Boltonias, Larkspur (fair), Arabis and other edgings, Achillea, hardy Asters, Lilies.
Annuals for Seeding in as Fillers: Shirley Poppy, Swan River Daisy (if massed), Sweet Alyssum, California Poppy (if thinned enough), annual Phlox, Sedum coeruleum (in cracks of stone), Ageratum, Mignonette.
Annuals not for the Perennial Garden: Annual Asters, California Poppy (dies if not thinned), Poppies (in mass, as they die), Scabiosa (weedy if not massed).
Annual Bulbs as Fillers: Gladiolus, Mexican Tuberose, Montbretia, Galtonia.
Annuals for Sticking in as Plants: Snapdragons, Rosy Morn Petunia, Tall African Marigolds, Stocks, Rose Geranium, Calendulas, Mayflower Verbena, Lemon Verbena.
Perennials as Emergency Fillers: Forget-me-nots, English Daisy, Campanula medium.

DAFFODILS OF THE BETTER KIND

S. STILLMAN BERRY

Some Recent and Other Little Known Arrivals Described by an Enthusiastic Amateur Who Has Studied These "Really Great Flowers" for Seasons in His Own Garden

I. Notable Members of the Trumpet and Leedsi Groups

Photographs by S. S. Berry and Adolph Kruhm

IN MANY places in the United States there seems to be considerable popular confusion as to just what constitutes a Daffodil, and it must be admitted that even the English authorities, to whom we must have recourse for reply, are not in the most perfect agreement in their definitions.

In the broader sense, Daffodil becomes simply the common English name for *any* plant of the botanical genus Narcissus, an interpretation which makes these two words complete synonyms. Others prefer to use only "Narcissus" as the more inclusive term; referring to the narrow-leaved, sweet-scented forms as "Jonquils"; the bunch-flowered forms as "Polyanthus Narcissus," the poeticus group as "Poet's Narcissus," and most of the remainder, which, except the Hoop-Petticoat group, agree in having comparatively broad foliage and ordinarily but a single flower to a stem, as "Daffodils." [On pages 118-119 of the April, 1924, issue will be found a picture display of the chief groups of the Daffodil family including the little Hoop-Petticoat.]

So restricted, and leaving out the Hoop-Petticoats, the true Daffodils still form

PETER BARR

*"the lovely English origination is quite the best I have chanced to try*** for indoor decoration we have found it exceptionally fine." Cream-white perianth and big pale yellow trumpet*

A TRIO OF DELIGHTFUL DAFFODILS

Weardale Perfection (left), an exquisitely proportioned flower of chaste outline with very long trumpet. Cleopatra (center), a gigantic golden-yellow with a perianth four inches across and a long, finely reflexed trumpet on a tall stem. St. Olaf (right), a stately member of the Leedsi group with white perianth and flat, sulphur-margined cup so fluted as to appear almost double

quite a heterogeneous assemblage, some of the members of which are nearly as different from the others as many of the eliminated ones, and which may itself be further subdivided into (1) the so-called Magni or Trumpet Daffodils, yellow, white, and bicolor; (2) the Incomparabilis, or Large Chalice-cupped Daffodils; (3) the Barri, or Short-cupped Daffodils; (4) the Leedsi, or Eucharis-flowered Daffodils; (5) the Triandrus Group; (6) the Cyclamineus Group. The last two groups comprise certain small-flowered wild species, together with the hybrids in which they are dominant, and, being characterized by a long, narrow trumpet and a strongly reflexed perianth, they are often referred to together as the Cyclamen-flowered Daffodils.

POSSIBLY because it is to this group that the original wild "Daffodyl" of "Merrie Englande" belonged, most treatises on the subject begin with the Trumpet or Magni-coronati forms, and it is entirely satisfactory for our present purpose to do the same. The older EMPEROR is so disappointing in my garden (at Redlands, California) that I have been glad to find several more striking flowers among the newer golden Trumpet Daffodils which behave themselves more consistently, and others, still finer, which I hope will prove equally amenable as they become established. Alas, an apparent exception is the glorious KING ALFRED. At its best this is a splendid big deep yellow flower, with the mouth of the trumpet most elegantly frilled and reflexed—rich gold throughout, and worthy of its noble name. But it does not appear that all stock being offered as KING ALFRED in this country is true, some strains yielding the unfortunate purchaser flowers which are worse than ordinary. Then sometimes the stock is more or less subject to disease. I have had noble flowers of the true variety at times, but have invariably lost most of the bulbs the second year. Happily, others have not had this trouble, and where it will do well KING ALFRED is a fine outstanding Daffodil. At its best the flowers are enormous, but of so even and well-chiseled a design as almost to appear artificially constructed.

Not so the even bigger CLEOPATRA, a gigantic golden-yellow flower with a perianth four inches across and a long, finely reflexed trumpet on a tall stem. It is not, however, a desirable Daffodil for the greedy grower. Seeing one, he inevitably wants a thousand, and let us hope that some day it will be low-priced enough so that he may have them. The 1923 catalogues show it to be fairly on the way, having now fallen to 2s. 9d. in England.

Meanwhile GLORY OF LEIDEN is a somewhat older and cheaper Dutch variety of fair merit which is reasonably available. It shows two shades of yellow, the big trumpet golden, the perianth a paler hue. If one is able to afford but a specimen bulb or two of CLEOPATRA, the main border of yellow trumpets can be filled out very satisfactorily with GLORY OF LEIDEN.

Another of the very good varieties which will surely be more commonly seen after a time is MONARCH. This is a really fine deep yellow Daffodil with the perianth and trumpet differing only slightly in shade to the human eye, but as the camera sees otherwise, photographs emphasize the difference to such an extent that MONARCH appears an outright bicolor in many illustrations. This is a floriferous Daffodil and one of the very good ones, though not quite so large as CLEOPATRA.

Another sure favorite in this section is LORD ROBERTS, a rich golden flower of massive proportions and high quality.

VAN WAVEREN'S GIANT is one of the very big fellows, which was much praised abroad a few years back. Here it is proving a good, moderately late Daffodil, the flowers of which are remarkable for their lasting qualities and the way they stand up in rough weather.

For sheer magnificence and size, however, nothing I have grown compares with a certain astonishing affair, which, hardly heralded, arrived last year out of Holland under the ponderous name, SIR DIGHTON PROBYN. It, too, is late, not so tall as CLEOPATRA as yet, but much larger—a perfectly tremendous flower. The widely expanded bright yellow trumpet, two inches in length arose from a primrose perianth just bettering four and three-quarters inches across—all this in the hands of one ignorant of trade tricks with just simple garden culture. There were two such behemothic flowers as this sent up from the single bulb under trial, and these set off by

the handsome broad foliage, made far and away the most imposing Daffodil picture in the garden. As might be expected from so huge a creation there are certain technical imperfections which can be picked upon by the critically minded. For instance, the perianth is probably none too clear in tone, and there is perhaps a little roughness of outline, but the flower is by no means so coarse as one might anticipate for such a giant. In the present case it was a triumph in being the first locally grown Daffodil I have seen approaching the almost fabulous dimensions that are always so tantalizingly dwelt upon in reports of the English shows. SIR DIGHTON PROBYN is a quite wonderful show flower. It is almost a bicolor in some lights and in photography.

Of the more pronounced and typical Bicolors the familiar EMPRESS has ever proven so well adapted to my conditions, so thrifty, so enduring under trying circumstance, so generally dependable, and withal so constantly chaste and beautiful, that I have been tempted to try only a few of the newer ones. EMPRESS does not increase especially fast with me, but this may be one very reason why it is such an indefatigable bloomer, never running out like EMPEROR, GOLDEN SPUR, and others that I am now rid of with relief. Beautiful and satisfactory as it is, I think that WEARDALE PERFECTION, an unusually exquisitely proportioned flower of chaste outline, is even lovelier. The trumpet in this variety is very long, quite narrow at the base, but with a flaring mouth, which gives it much character. Flowers five inches across are said to have been exhibited in England—three and a half inches is the best I have been able to do. Even so it is superb!

Among White Trumpets, with the exception of a certain unknown but marvelously sculptured variety, one of the most chaste Daffodils I have ever seen, sent me from Holland some years ago by mistake for WHITE QUEEN, the lovely English origination PETER BARR is quite the best I have chanced to try. Not among the tallest by any means, its cream-white perianth is perhaps cupped too much to be of the finest form, and the size and substance of the big pale primrose trumpet causes the flower to nod heavily, but it is a wonderfully attractive Daffodil just the same. For indoor decoration we have found it exceptionally fine. It is still moderately expensive (a dollar a bulb), but like many another treasure is gradually tending lower in price.

THE Leedsi group, being practically but a color division, white, is a highly artificial one, and comprises many forms which might about as well be classed with the Incomparabilis section, while some of the newer creations even approach rather dangerously to some of the white Magnis. But there are certain traditional standards of perfection which have been generally followed by the breeders, and the group as a whole is well characterized not alone by the pale coloring, but by daintiness of outline and grace of poise. It includes some of the most chaste of all Daffodils.

The well known WHITE QUEEN is a demure example of the class, but modest indeed in comparison to some of the newer beauties such as LORD KITCHENER, CZARINA, or ST. OLAF, the first two of which belong to a comparatively recently developed group of Giant Leedsis having a large, chalice-shaped crown or trumpet and flowers of dimensions approaching those of the leading giants of other types. LORD KITCHENER is indeed one of the most beautiful flowers of any sort that one could possibly grow. The light primrose crown flares widely and is most wonderfully wrought into all manner of charming crimps and fluting at its brim, while it is set off and vastly enhanced by a fine white perianth. It is quite a tall grower, generally healthy, and increases quite well, but with me is behaving somewhat like EMPEROR in that the old stock is gradually becoming less floriferous. Perhaps my treatment does not quite suit so fastidious a taste.

SIR DIGHTON PROBYN

"For sheer magnificence and size nothing I have grown compares with this perfectly tremendous flower—widely expanded bright yellow trumpet, primrose yellow perianth"

MONARCH

"A really fine deep yellow—a floriferous Daffodil and one of the very good ones"

CZARINA is a somewhat similar flower, said to measure five inches in diameter in England, but as usual nowhere near that with me. In Redlands it has not attained quite the size and general high level of LORD KITCHENER, yet few Daffodils have been more admired.

ST. OLAF is a tall and stately Leedsii of entirely different effect. With its broad, rounded, white perianth, and flat, sulphur margined cup, so fluted as casually to appear almost double, this flower has much the aspect of a creamy Barri or a poeticus. One fault may be mentioned, a narrowing or turning back of the perianth segments after the flower has been open a little while, always a disappointing occurrence in Daffodil behavior. This flower also I have been unable to induce to expand to the published English dimensions, but a fine and satisfactory thing it is proving itself nevertheless. It is altogether distinct from other varieties.

[In October Mr. Berry will discuss "Better Daffodils" of the Incomparabilis and Barri groups, also the Jonquil]

Home of Mr. C. A. Williams at Kent, Ohio

William Pitkin, Jr. and Seward H. Mott, Landscape Architects

Albrecht, Wilhelm & Kelly, Architects

Photographs by Thomas Ellison

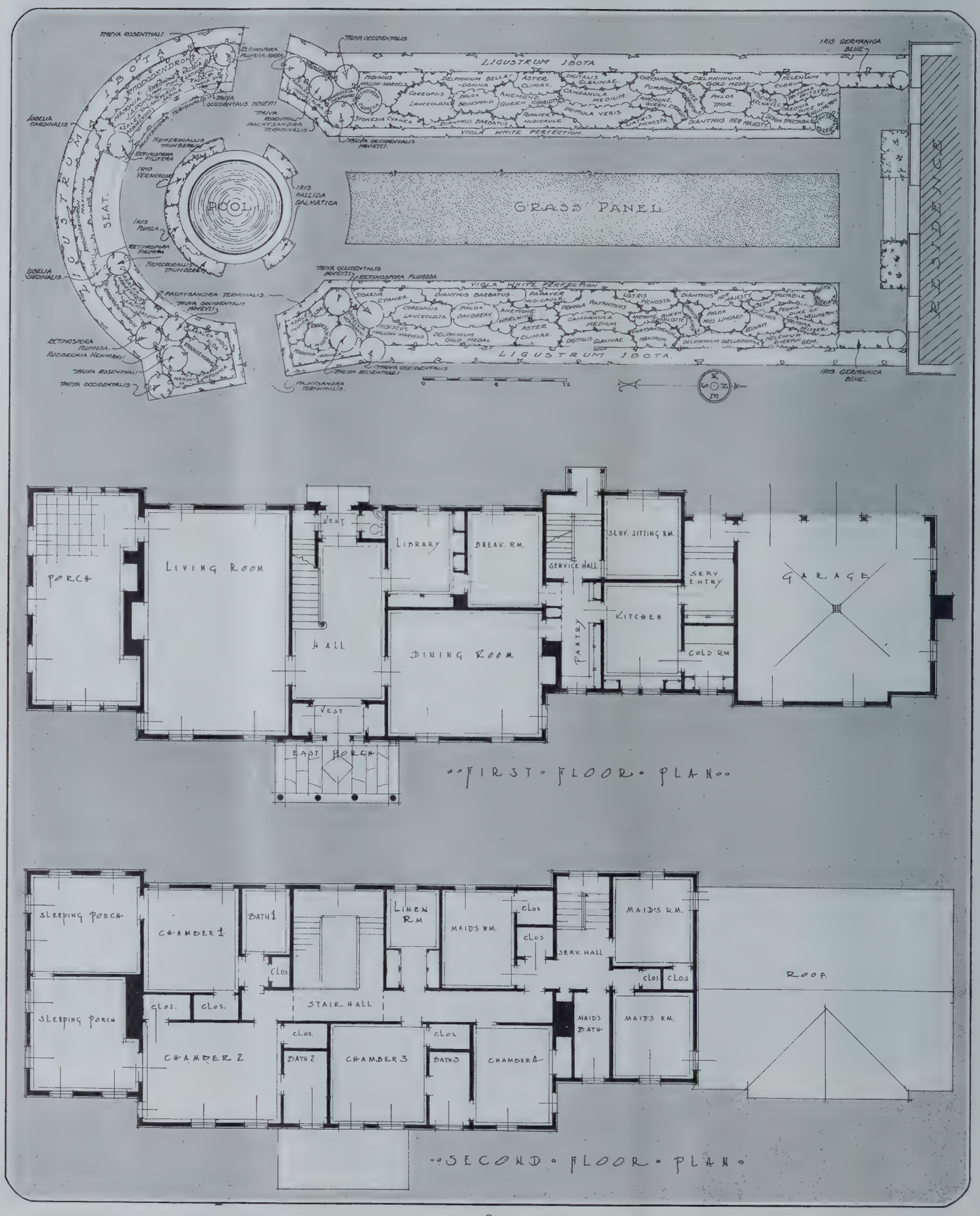
Though the planting, as shown above and in the two pictures on opposite page, is only a year old it already gives a fairly finished result, very encouraging to the home builder eager for quick effects since what has been accomplished in one case may well be repeated in another. A detailed plan of this garden, also two of the house appear on page 28

Economy of maintenance was carefully considered when making the plans for this place (see opposite page) and the gardened spaces are restricted to a very limited area immediately about the house, the land beyond being planted to Alfalfa and Meadow-grass

Looking from the house down the grass panel flanked on both sides with a perennial flower border. The reverse view appears opposite and a planting list and general plan of the garden follow on the next page

Plans of the Garden and Residence of Mr. C. A. Williams

The garden was designed by Messrs. Wm. Pitkin, Jr., and Seward H. Mott, the house by Messrs. Albrecht, Wilhelm & Kelly, both of Cleveland, Ohio (see two preceding pages)



The National Garden Association

Formed to promote the annual observance of National Garden Week

LEONARD BARRON, F.R.H.S., President

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THE Anti-Billboard Campaign so earnestly supported by the Association, has been productive of far-reaching results. Garden clubs and civic-minded folk everywhere have strengthened and helped us by their encouraging letters. But perhaps nothing has more clearly shown the actual achievement than does the following from *Printer's Ink:*

EDUCATION TO AID OUTDOOR ADVERTISING

A Fellowship providing for Research Work on Beautifying Outdoor Advertising is established at the University of Wisconsin. The Poster Advertising industry has turned to an educational institution for aid in solving some of its problems. The University will conduct experiments looking toward the betterment of outdoor advertising throughout the entire nation. This will aid in doing away with billboards which are distasteful.

This is not only a step in the right direction, it is a Gargantuan stride that can not fail of most important results. And once again the Association emphasizes its belief that "disfiguring and ill-placed billboards *must* go!"

IN ALMOST every community there has been some new garden activity in the interest of community betterment of which word comes to the Association and from a little ten year old boy, Harold Morton Esty, Jr., of Buffalo, N. Y., has come a joyous summing-up of garden philosophy that it seems to us the happiest of omens:

HAPPINESS

A bit of soil,
Some little seeds and sunshine,
Will make a garden full of happiness
For you and me.

If the children can thus realize what gardening and love of nature can mean, then may we, indeed, feel certain of our country's welfare when these children become its citizens.

This has come most opportunely for, with the renewal of school this month, we feel the need of again calling attention to the excellent work done by The School Nature League. School Gardens in congested city districts open up new worlds to the children and we hope that Garden Clubs everywhere will urge the taking up of such work in their schools. The League has issued a most interesting leaflet with suggestions for collecting material, giving lists of plants to be collected each month. Copies may be secured from Prof. Emilie O. Long, Nature Room, Public School 62, 25 Norfolk St., New York City.

AS FALL—the earlier, the better— is time for planting evergreens, we are glad to publish this letter from Mrs. Warder I. Higgins, President of the Garden Club of Butte, Montana:

We are asking the Women's Club of the General Federation to create more interest in the planting of evergreen trees to be used—when large enough—for Community Christmas Trees. In Butte, this year, we hope to plant a few trees in school grounds. The Boy Scouts are willing to go out and dig up the evergreens and the Forest Service will supervise the work. What a fine thing it would be if there were planted at least one evergreen tree in every town where Garden Week has been observed! I would urge that evergreens be planted in parks, children's playgrounds, and school yards, to be used later for Community Christmas Trees.

This is conservation of the right kind, in line with the far-reaching plan for community betterment work carried on at Fort Wayne, Indiana, by the Chamber of Commerce through its Civic and Municipal Bureau with the aid of men's and women's clubs, and called the Better Yards Campaign. It was begun three years ago in an endeavor to arouse city-wide interest in the possibilities for better homes and greater beauty in the city. Contests, clean-up weeks, and prizes furthered the work so successfully that it has become a permanent affair. Last year the city was divided into eleven districts and 52 subdivisions and nearly 5,000 yards were entered in the prize contests. It is now hoped to include every block in the city in this work.

Realizing what aroused interest among the children would mean, arrangements were also made last year for their participation. Seven thousand each of seven different hardy plants, (49,000 in all) were potted for distribution among the school children and each child was given a printed slip of cultural directions. With the opening of school this month, there will be a flower contest between the grades and individuals in each school, the winner to be entered in a city-wide children's contest at the Annual Fall Flower Show of the Better Yards Committee. This is by far the most comprehensive and outstanding community programme yet received by the Association, and one that could be successfully conducted in every large city or town in the country.

As one of the Fort Wayne booklets says:

The frequent discovery and utilization for public good of the talent of citizens sometimes revealed in most unexpected fields, is one of the great surprises and sources of pleasure and reward for service to the community through Chamber of Commerce work.

When the need for a man or woman of special talent for a particular field of work arises, that man or woman is found and added to the hundreds already serving, usually surprising all by his or her ability.

Thus, Talent becomes Man-Power.
What is the Man-Power of *your* town?

Free booklets and bulletins: Home Storage of Vegetables, Constitution, By-laws and Programme for Garden Clubs, Rural Planning, Insect Enemies of Chrysanthemums, Grow a Vegetable Garden, An Enemy of the Greenhouse Rose.

Address all communications to The National Garden Association, Garden City, N. Y.

WHAT FLOWERS TEACH A CHILD

FLOWERS not only give a sense of hominess and intimacy, but serve many useful purposes in a child's room or nursery. A large proportion of a child's education results from the opportunities for experience that he has. It is not always possible to let the room develop with the boy as he grows. Some plant life will tend to supplement him at this time, to say nothing of the actual first-hand information he gets on a very important branch of human knowledge. Plants will be useful in providing the young child with a sense of responsibility and importance if he is taught to care for them regularly and properly. They will also be found a valuable point of departure in enforcing the discipline of the household in a dignified and impersonal way. By indicating the course of procedure in nature, a child will more readily see the reasonableness of circumstances. And the artistic result is particularly good, for there is much to learn of color and form and fitness by a child who is surrounded with these things and taught how to observe them intelligently.

PRETENTIOUS FRAUDS IN FRUITS

U. P. HEDRICK

Vice-Director and Horticulturist, N. Y. Agricultural Experiment Station
Author of the "Cyclopedia of Hardy Fruits", "Apples of New York", etc.

Fruits of Quality Which the Intelligent Home Gardener Will Substitute for the Much Over-rated Commercial Successes too Commonly Grown—The Fall Planting Season Just Ahead Offers Golden Opportunity for Next Summer's Enjoyment of Really Good Garden Varieties

THAT the title of this article is sensational—chosen to attract anew the attention of those who persist in planting varieties that belong in the rogue's gallery for fruits, I do not deny. I know also that I am but reminding and not informing some of my readers, for the fruits to be discussed have no uncertain reputations. I may as well admit, also, that I want to get into the pomological arena and contend with any defenders of the fruits I am about to name.

The fruit-growers of the country, amateurs as well as professionals, present the base and sordid spectacle of men deliberately growing poor fruits when they might as well grow good fruits.

I am particular about the phrase "might as well grow good fruits" because it is a fact that needs emphasis. It costs no more to grow good varieties than poor ones, difficult thought it is to make many planters believe it. If it did it might truly be said that I am encouraging the growing of fruit for a select few who can afford to gratify a cultivated taste. To the contrary, I want to encourage good fruit for the multitude, fruit both good and plentiful, so that the average person, personification of the multitude, can fall to with a vigorous appetite and heartily enjoy either the fruits of his own growing or those of the professional grower.

OUT of the two hundred or more apples listed by American nurserymen, not more than fifty are commonly cultivated in the country for all regions, seasons, and purposes, while the sorts of prime commercial importance are not many more than a dozen. Two of this smaller list are pretentious frauds.

BEN DAVIS ranks among the leading half-dozen commercial apples in America. Trees and fruit are about ideal in every respect except in quality. Only fair for culinary purposes, the fruit is scarcely more desirable to eat out of hand than a turnip. Ben Davis came into prominence when an apple that would keep in common storage and that could stand rough usage in shipping was a necessity in apple growing. Cold-storage and improved methods of packing and shipping do away with the necessity of Ben Davis and all of its numerous offspring and kin of which GANO or Black Ben Davis is best known. No reputable fruit-grower ought to think of planting these varieties at the present stage of development of the fruit industry.

YORK IMPERIAL is another standard apple with the same good qualities and the same fatal defect ascribed to Ben Davis. It has an additional fault: it is lopsided and cannot be pared with a machine, and so falls short as a culinary fruit. PEWAUKEE and NORTHWESTERN GREENING come within the fifty if not within the dozen commercial sorts, both so poor in quality that they should be put in the rejected list for all regions, except those in which great hardiness is a prime requisite.

It will hardly do to put BALDWIN, the best-known American apple and ROME BEAUTY, a leading market sort, on the blacklist. Their places cannot be filled in commercial orchards because of the splendid character of trees. Both are good culinary sorts but are mediocre in quality and should seldom be planted in home orchards, now that there are a score or more better flavored apples for nearly every apple region of the country.

THE most pretentious cheat in American orchards is the KIEFFER PEAR, yet it is more commonly grown than any other pear in North America excepting Bartlett. The trees are nearly perfect, as pears grow in the American climate, which is not of the best for this tree; but the fruits are scarcely edible uncooked, and fall far short in all home culinary preparations, so that there remains only the commercial canneries through whose art the Kieffer becomes edible but never delectable. GARBER and LE CONTE of the Kieffer tribe may also be put down as "fruit frauds."

AMONG peaches the ELBERTA leads all others in America both in number of trees and quantity of product. The trees are nearly flawless; and the fruits are large, handsome, keep and ship well, but they fall far short in quality, lacking the richness and sweetness that the best peaches have. Also the flesh is tough and stringy. Europeans, accustomed to better-flavored peaches, seldom swallow their first bite of Elberta, disliking its tough flesh and finding its bitter tang unpalatable. It would, however, be an injustice to put Elberta down as an out-and-out fraud because many learn to like it, but to most of us its looks belie its taste. Moreover, it has been planted in eastern America in all peach regions, for all purposes, and is found in the markets in all seasons so that we have a condition of "too much Elberta." It is quite too bad that the peach must be represented almost wholly in American markets by Elberta when there are scores of other peaches of other flavors, seasons, sizes, and colors, many of which are better in quality for the great purpose for which peaches are grown, dessert fruit.

FINE FRUITS THAT ARE NOT FRAUDS

Apples: The best sorts in the order of their ripening are Early Harvest, Early Joe, Sweet Bough, Chenango, Porter, Fall Pippin, McIntosh, Cortland, Jonathan, Spitzenburg, and Yellow Newtown.

Pears: The list of good kinds includes Tyson, Clapp Favorite, Bartlett, Sheldon, Seckel, Bosc, Dana Hovey, and Winter Melis.

Cherries: The season is covered by three good Sour Cherries: Early Richmond, Montmorency, and English Morello, and by six Sweet Cherries: Coe, Ida, Napoleon, Black Tartarian, Schmidt, and Windsor.

Peaches: Of these the best are Greensboro, Carman, Yellow St. John, Champion, Crawford Early, Crosby, Late Crawford.

Plums. Everybody will want Abundance and Burbank to represent the Japanese sorts; German and Italian Prunes, and Reine Claude, Jefferson, Washington, Agen and Imperial Epineuse for the European Plums.

Grapes: For table use: Worden, Concord, Delaware, Brighton, Lindley, Barry, Portland and Ontario; Ives is the best Grape for red wines, while the Delaware and Iona make the best white wines. Clinton also makes a very good red wine.

Raspberries: The most excellent Red Raspberries include June, Cuthbert, and Herbert. Latham is one of the very hardiest and free from disease, not of the best quality of Everbearers. Ranere (often offered as St. Regis) is the best for sandy soils. Of Black Raspberries the best are Plum Farmer, Gregg, and Black Pearl.

Currants: Five good varieties are Diploma, Wilder, Fay, Cherry, and White Grape.

Blackberries: Two good kinds are Eldorado and Erie.

Gooseberries: A trio of good Gooseberries are Poorman, Industry, and Chautauqua.

Strawberries: This fruit varies so with different localities that it is not wise for any man to offer suggestions as to varieties for other than his own locality Go and ask your neighbor!

MORE poor varieties of the common plum are planted than of any other fruit. The BRADSHAW is the favorite plum in the East, yet it is below the average in quality. LOMBARD, everywhere commonly planted this side of the Mississippi, is a fraud. To judge POND by appearance is a grievous error—the eye is pleased, but the palate is sadly disappointed. The fruits of YELLOW EGG are about the largest and handsomest of all plums, but the fruit is fit only for cooking—and is none too good cooked.

The plums named owe their great popularity not only to attractive appearance, but, as is the case with all of the other "pretentious frauds" named, to the fact that the trees make a vigorous growth in the nursery. Many splendid fruits are "born to blush" unseen because they grow poorly in the nursery and nurserymen will not grow them. Many sorts that should remain in the limbo of the nurseryman's catalog because their fruits are not up to the mark, are commonly planted because they grow well in the nursery and nurserymen push them.

AS VARIETIES run among the small fruits, not much fault can be found although there is more difference in the flavors of grapes than almost any other fruit and all of the berries have well-flavored and poorly-flavored sorts. But the breeders of small fruits have pretty consistently christened only the high-quality seedlings. The gooseberry is an exception.

A well-ripened gooseberry is one of the most delectable fruits. Yet few Americans have ever tasted a good gooseberry, one that a native of Great Britain would recognize as even a fair representative of the species. In the first place, gooseberries in America are seldom permitted to ripen, or at least nearly always appear on the markets in the green state, in which condition they are fit only for cooking. Neglect takes another turn. HOUGHTON and DOWNING are about the only varieties planted and both are frauds as truly as any other of the fruits that have been named. A dozen better sorts can be grown. Gooseberry culture in America is in the deplorable state of being represented by two inferior sorts, when the culture of a dozen choicely good sorts, easily obtainable, would soon put the gooseberry among the major fruits as it is in the northern European countries.

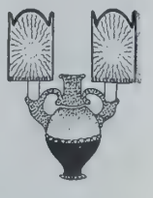
IT WILL, of course, be said that what I have written is sentiment and not business. I am not averse to putting some sentiment in fruit-growing but it is good business to grow good fruit. Better fruit means the consumption of a great deal more fruit. It will help to prevent the substitution of sub-tropical fruits for hardy home-grown fruits.

Better fruits will give greater delights in the home orchard, and the accompanying table lists varieties from which the gardener can make a selection and know that he will have fruits which are really worth eating.

FURNISHING ON A BUDGET

MARGERY SILL WICKWARE
Decorator

Photographs by courtesy of the New York Art Center



Making the Little House Seem Bigger by Suitably Chosen Colors and Furniture to Scale—Practical Suggestions for the Young Couple Who are Outfitting Their First Home and for All Beauty-loving Folk Who Have to Count Their Pennies

EDITORS' NOTE: That "a house reflects the personality of its owner" is one of those axioms which are so often stated that finally they seem true. We heartily wish this one were! Presently perhaps it will be, and when it is, it will mean something much better than the average run of homes to-day that are rather the reflection of the manufacturers' ideals than of the true desires of their owners. To the many hurried and harried people, busy about the passing affairs of day to day living, with scant leisure to spend on the pleasant study of color harmonies and restful space divisions, the present exhibition at the New York Art Center showing "Beauty and Economy in House Furnishings" is a veritable boon. Here the furnishing problems of the little house and the even littler apartment and "hall bedroom" have been met and solved in astonishingly successful fashion. Here the public may enjoy and profit by concrete and widely applicable examples of "good taste" in home furnishing, the essence of many years' experience of a distinguished group of decorators contributed in generous response to the invitation of the Art Center. And, incidentally, this is only one of many constructive educational services of the New York Art Center in its steady furtherance of a finer national perception and taste, for which we cannot be too grateful.

IT IS quite possible to have lovely and distinctive rooms within the limit of a small income. It is not necessary to spend large sums of money, to go to the smartest shops, or to employ professional decorators, in order to obtain effects that are really charming and livable. This has been proved conclusively by this summer's exhibition at the New York Art Center of model rooms furnished by a group of decorators at very moderate cost. A budget was made out and each decorator went to work to achieve the most attractive possible results within a limited sum. Some of the largest and most popular of the New York department stores, those which are widely patronized by all classes, were assigned as the source of supplies, and it was surprising to me to find amongst their stock so many things having real artistic value, which could be purchased at low prices. True, it took days of shopping, of digging about, of elimination, and of careful choosing. But when one starts out to furnish a room on a small amount of money, one must use all of one's wits, much time, and some ingenuity. With these three aids, it is entertaining to see what genuinely interesting results can be obtained, and what fun one has in getting them. For, of course, it is really the greatest kind of game—making something good and pleasing, with very little money to spend.

Nowadays, when perforce and for a number of reasons so many people live in small homes they frequently seem to feel that it is quite hopeless—handicapped by inadequate space on the one hand, and by limited incomes on the other—even to try to have attractive surroundings. Everything they want most appears quite beyond their reach. Too often they give up discouraged and take whatever is offered that comes within their price limit. And the result is apt to be chaotic—a house or a room without harmony—just a haphazard collection of furniture, totally unrelated in regard to size, shape, or color—furniture that is useful perhaps, but certainly nothing more.

Fortunately, this dire result can be avoided by thought and care; and harmony, order, and design can be had in place of chaos. And going a little farther, harmony may lead to beauty, and beauty be expressed in terms of individuality and distinction, simply by adhering to a few primary rules of proportion and design.

H. Shobbrook Collins, Photo.

A LIVING ROOM FURNISHED ON A BUDGET

"It is always advisible to select a color scheme in advance, and keep oneself strictly to two or three hues in the varying tones that harmonize best." This little room, done in soft yellows and green, delightfully exemplifies the wisdom of Mrs. Wickware's advice, and was completely furnished and decorated by her for $460.59. It may be seen at the Art Center (New York City) until September fifteenth

H. Shoblrook Collins, Photo.

A DINING ROOM FURNISHED ON A BUDGET

"An important consideration is getting furniture in proportion with the size of the wall spaces and the pitch of the room. The various handicaps in the arrangement of small spaces are well overcome by the exhibitors at the Art Center." This dining room (on view at the N. Y. Art Center till Sept. 15th) with its furniture of modified Spanish type, sand-colored walls, and pleasant touches of orange and sepia in draperies, etc., was completely fitted out for $451.20, by Mr. Gilbert of Nancy McClelland Inc.

H. Shobbrook Collins, Photo.

BEDROOM FURNISHED ON A BUDGET

For the young housekeeper who is starting out to furnish from the very beginning such rooms as this (on view at N. Y. Art Center till Sept. 15th) and the two shown on preceding pages offer much helpful suggestion as the furnishings for all three were purchased entirely from department stores at very moderate cost. Painted walls of soft bird's-egg blue, corn-yellow bedspreads, and a finely patterned chintz in which orange predominates make this little bedroom gay; decorated for $150 by Miss Emma B. Hopkins of J. R. Brenner & Co.

The first problem that one meets in the small home—that of limited space—is undoubtedly difficult. In this connection perhaps the foremost consideration is the background color. We all know that keeping the walls in a small room light instead of dark, tends to make it look larger. But the use of soft neutral tints, buffs, grays, putties, and creams, will create an illusion of space that cannot be got with vivid clear tones of brilliant colors. The eye is more readily attracted to, and therefore more quickly wearied by, extremely bright colors; so that in a living-room, even when one wishes more than neutral color in the walls, it is best to use soft light tones, the palest of turquoise, apricot, rose, sage, or powder blue. For the very slightest suspicion of color in a background may be made to appear a much deeper tone merely by use of brilliant values of the complementary color in cushions and lampshades. The smaller the room, the softer and more neutral in tone should be the color of the large areas, reserving the deeper and more vivid color for small objects, pipings, and such limited spaces.

In draperies, clear fresh colors are always desirable. And one can obtain much more charming and original results by avoiding the unfortunately stuffy-looking fabrics often handed out in shops for hangings and upholstery, and making use of other textiles, perhaps not originally intended for household decoration, but suitable and worthy of use. If a material is tub-fast and sun-fast—and so many are to-day—if it is sheer and lovely, it can always be used for curtains. Decorators make use of almost all soft fabrics now, for undercurtains especially, from mulls, organdies, dotted swisses, muslins, tarlatans, all the way through the whole line of marquisettes, nets, gauzes, chiffons, and soft casement silks. For upholstery, of course, one must also consider the stoutness and durability of the material. But often a slip cover can be made to do duty the year round, and by making it to cover the chair completely and putting a ruffle around the bottom, it may transform an old and ugly piece of furniture into one that tones in charmingly with the room.

It is always advisable to select a color scheme in advance, and keep oneself strictly to two or three hues in the varying tones that harmonize best, even if it takes a little longer time for the shopping search. And no better way for selecting a color scheme can be suggested than choosing one from the better grades of chintzes, linens, and cretonnes now on the market. Very fine work is being done to-day in textiles. The designs are made by experts in their line, by workers trained to know what is most durably pleasing in color combinations. Therefore, even when the fabric is too expensive to be used, careful study of the colors employed, and careful matching of cheaper fabrics with the original tones—at times in a solid hue varied by piping—will almost invariably produce an interesting result.

THE next question to be considered is getting furniture that will be in proportion with the size of the wall spaces and the pitch of the room. You do not want the pieces, of course, to extend beyond the edge of the trim on door and window, or above the level of the door top. Yet these very awkwardnesses frequently occur because, in buying, someone depended on the eye to judge bulk and distance. In this case a yardstick is of inestimable value, and a few measurements taken before going on a shopping tour will prevent disastrous purchases. For nothing is worse or more tiring to the eyes or nerves than an essentially overcrowded room.

It is quite true that much of the furniture found in the store to-day, particularly in sets, seems built for a giant race. While on the other hand the builders of the modern small house or apartment apparently count on

everyone's being quite stunted. But even this difficulty can be overcome by a little persistence, and I believe the results will repay all the labor involved in reaching them.

The various handicaps in the arrangement of small spaces are very well overcome by the exhibitors at the Art Center, where in almost every case the rooms are exceedingly small. All kinds of rooms are represented, from the hall to a large and delightfully comfortable porch fitted in French rattan.

For the young housekeeper, who is starting out to furnish from the very beginning, probably the most helpful part of the exhibition is the group of four rooms including a single bedroom, a double bedroom, a combination living-and-dining-room, and a kitchen. Naturally the largest of the group is the living-and-dining-room, papered with quaint gray and white landscape paper, furnished in dark woods, Early American in tendency—gate-leg tables, ladder-back chairs, varied by comfortable stuffed chairs and a luxurious davenport. There is a one-tone rug in dull blue on the floor, a color repeated in the upholstery of the sofa. Soft red has been used for the draperies, which warms into true orange in lampshades and ornaments, while a chair slip and several cushions of bright chintz lend a touch of vividness to the whole effect.

In the bedrooms the furniture is very simple in design, daybeds and cots being used, with attractive spreads of chintz or cretonne. The walls of the single room are covered with a white ground paper filmed by a vine-like tracery in black, gray, and orange. The chintz used at the windows and on some of the chairs repeats these colors with the introduction of a little blue. A variety of fabrics for bedspreads and slip covers, checked gingham, and plain glazed chintz, helps to break up the large spaces. In the double bedroom no paper was used. The walls are painted in an exquisite tint of soft bird's-egg blue. The fine patterned chintz at the windows, in which orange predominates, has been used in bands on the corn-yellow bedspreads and in upholstered cushions in the chairs.

The four rooms complete reached an aggregate cost of $804.50*, so it would seem quite possible for any one who has a keen enough desire for harmoniously arranged rooms to obtain them through the use of a little thought, care, and discretion.

*This estimate does not include the cost of making curtains which were in every case designed so that they could be made quite easily at home by any one with a knowledge of simple sewing.

HINTS FOR THE MAN WHO IS HANDY AT HOME

BEFORE winter comes it is a good plan to examine the wooden bands which provide guides for sliding sash in window-frames. They are usually of hard pine $\frac{3}{8}$ x 1 in. and lie tightly in a rabbeted groove in the sides of the frame without other fastening. Sometimes they warp out of place, especially at the bottom, the upper half of the length being held in place by the upper sash. This lets considerable cold into the house around the windows.

The best way to anchor warped window bands firmly in place is to drill and countersink a hole edgewise through each band, say six inches from the bottom end, and through it drive into the bed of the rabbet in the frame a slender $1\frac{1}{2}$ inch brass wood screw.

SHARP edged tools—carpenters' tools as well as kitchen knives—ensure good work. For keeping them in condition a small carborundum grinding wheel to be clamped to the work bench or kitchen table and turned by a hand crank is an indispensable adjunct to the home workshop. With it chisels may be ground free of nicks and then finished to perfect cutting edge on a small flat oil stone. It affords an easier and better method than filing to keep flat sides and square ends on screwdrivers and good cutting edges on kitchen and carving knives. If one has a utility motor (see photograph page 40) for miscellaneous kitchen work or to run an ordinary sewing machine, a grinding wheel attachment may be had for it.

A NICE carpentry job, especially on portable articles which must withstand the strain of handling, often requires the use of screws instead of nails. Screws have the great advantage of drawing two parts together and rarely loosening. Holes must always be drilled for screws. They drive more easily and splitting of the wood is avoided.

An awl may be sufficient for small screws in soft wood. Otherwise use a drill a little smaller than the wire of the screw, thus leaving enough for the worm of the screw to cling to. Countersink the holes for flat-head screws so that the heads of the screws when in place will be flush with the surface of the wood, or on especially nice work enough below to permit filling the holes with putty.

On a big job a screwdriver tip in an automatic drill or bit brace saves labor and avoids a blistered hand.

WATCH a good carpenter and observe how true are his hammer blows square on the head of a nail. Notice that he holds the hammer toward its end, thus making a straight forceful blow possible.

Grasping a hammer near the head means weak blows and usually bent nails and injured fingers.

A good carpenter's claw hammer is the only one to use for woodwork. Do not try to use the machinist's hammer from an automobile tool kit. The striking surface of the head is usually somewhat rounded and bent nails and pounded fingers will result.

DO NOT apply paint to a damp surface, as it will be likely to peel off. On new work cover all knots and sappy places with pure shellac varnish. Putty nail holes after applying the priming coat.

If the surface to which the paint is to be applied is free of pitch and sap, it is better to thin the paint by the addition of raw linseed oil for the first coat, as the wood will absorb a large amount of oil and will only take paint enough to fill the pores.

If the wood is full of pitch and sap, thin the first coat with turpentine so as to cut it, as when only two coats are applied to old wood it is best to thin the first coat with oil or turpentine. The second coat should be put on full weight.

Ready mixed paints are best for most small painting jobs about the house. They may be had in all shades and colors for every purpose in half pints, pints, quarts, and larger cans. Usually they are ready for use on painted surfaces after thorough stirring.

BRUSHES used for occasional little paint and varnish jobs about the house will quickly dry hard unless cleaned thoroughly in turpentine after use or else kept standing in a can or jar of turpentine. Several small brushes, handles and all, may be kept in a two-quart fruit jar containing half a pint of turpentine. The rubber sealed top will prevent hasty evaporation of the turpentine. Shellac brushes may be similarly cleaned or stored in denatured alcohol.

A paint brush which has dried hard may be cleaned by boiling it in vinegar in an old pan until the paint softens. Remove the softened paint with a putty knife, work the brush back and forth on old newspaper until it becomes sufficiently pliable and then give it a final cleaning by dipping in turpentine and again scraping with the putty knife.

National Garden Week for 1925 to be observed April 19th to 25th

Flowers and vegetables thrive in friendly proximity in this little 35 x 60 ft. garden in the Canadian capital

OUR "POSTAGE STAMP" GARDEN

J. B. SPENCER

Utility and Quality on a 35 x 60 Ft. Plot—Choosing Really Good Material to Live with Day by Day—Roses, Perennials, Shrubs and Vegetables Which Flourish in Neighborly Fashion on Very Limited Space

The Gold-banded Lily (left) of Japan wafts its delightful fragrance over a whole neighborhood at the evening hour and the Tuberous Begonia (below) solves the problem of shady spaces

THE wife of a physician living in a suburb of New York City, who paid us a visit last summer, was very enthusiastic about our "postage stamp" garden, which is really a back yard thirty-five by sixty feet. Our guest was so much impressed with the wealth of flowers produced in this little area that she urged me to tell fellow gardeners the methods by which such results are achieved.

It seemed hardly possible that our garden was quite equal to the appreciation of our guest, because the Canadian capital has many fine gardens and there seems nothing extraordinary about our own. Indeed, but a few years ago Ottawa was named "The City of Gardens" and visiting tourists agree that the designation was not inapproprate. For many years Ottawa has been holding garden competitions and flower shows, and our little garden and its products have figured prominently in these contests; and with considerable success.

Like many other city lots, the garden had to be made. About fifteen years ago it was reclaimed from a swampy, willow-covered patch of ground. Had care not been taken in selecting the soil that was used to bring it up to the desired level, success would have been more difficult. Whenever a local excavation for a new house was in progress, the top soil was secured, until the foundation for a fine garden was laid. From the beginning, crops of vegetables have been grown each year, but as time has gone on the area devoted to Asparagus, Tomatoes, Beets, Carrots, Onions, Peas, and Beans, has been more and more reduced to make room for the things that so greatly delighted our American visitor.

The general plan of the garden has not been greatly changed from its early years. This plan is shown in the first illustration which is reproduced from a photograph taken eight or nine years ago. The board fences have since given place to wire; a brick path has been laid skirting the perennial border, and a Rose arch spans this walk toward its lower end. A pyramidal Cedar growing beyond this arch provides a feature to which the eye is drawn. The little Canna bed in the foreground has been superseded by a pool which, with its Water-

lilies in varies hues and flashing gold fish, excites the interest of visitors perhaps more than any other single feature. [The construction of this pool was described in the GARDEN MAGAZINE for June, 1922.]

THE perennial border shown in the picture was constructed on the orthodox plan with Hollyhocks, Delphinium, perennial Heliotrope and Helianthus forming the back row: Phlox, Oriental Poppy, Anemones, and Shasta Daisy sharing the centre with Canterbury-bells, Iris, Columbine, and Sweet William. These were fronted with Daisies, Pinks, Alyssum, Stone-crops, and Pansies. Such an arrangement in so small a border was difficult to maintain in pleasing combination, because reasonable elbow room could not be maintained. Plant after plant was eliminated and still without satisfactory results, because soon after the early bloom had passed shabby spots were bound to mar the general effect.

From its earliest years this border has been well filled with flowering bulbs. The Snowdrops open the season and are followed by Scillas, Chionodoxas, Crocus, Daffodils, and Tulips of the various classes. It was when these were past and gone that the border became a worry, and five years ago it was entirely reconstructed. Five Peony plants of good varieties were distributed at regular intervals down the fifty-foot border with climbing Roses supported by the wire fence as a background. The best of the Phlox (including Elizabeth Campbell, Miss Lingard, Thor, and one or two others, named) were retained. A few plants of carefully selected named varieties of Larkspur (including Statuary Rude, Harry Smeetham, Rev. E. Lascelles, and Moerheimi) were distributed between the climbing Roses. The remainder of the border was planted with Lilies and Iris, with here and there a special plant selected to harmonize with its neighbors.

The growing of Lilies was undertaken with some misgiving because so many neighbors had met with indifferent success. Without giving special attention to either the soil or fertilizing, the venture has been satisfactory. Following are the species that have succeeded: tenuifolium, superbum, Henryi, martagon, tigrinum, and candidum. These have done well year after year and during the past season we had wonderful blooms of regale and auratum, with fair success with lancifolium (or speciosum) rubrum.

IN OTTAWA, as in many other places, the Iris has made rapid advance in recent years. The Horticultural Society added an Iris exhibition to its list of shows two years ago, and it was there that the varieties for our perennial border were chosen. These include Albert Victor, Florentina, Monsignor, Queen of May, Rhein Nixe, Alcazar, Cherubim, Caprice, and a very dainty little sort called Marion. When out of bloom the Iris, Peonies, and Lilies are not unsightly, a very desirable point in selecting plants for a border that has to be lived with the summer through.

In order that this garden might hold its own in the Tulip shows, space had to be found for the growing of some of the finer sorts of Cottage, Darwin, and Breeder types. In preparation for this about fifteen inches of the border along the walk was almost completely cleared out of old bulbs and perennials. In this space the Tulips were planted in clusters of nine. The Cottage varieties included Mrs. Moon, Sir Harry, Moonlight, Scarlet Emperor, John Ruskin. The Darwins take in City of Haarlem, Baronne de la Tonnaye, Pride of Haarlem, and Clara Butt. The Breeders are perhaps the finest of all in such varieties as Apricot, Lucifer, Turenne, Dom Pedro, Afterglow, Bacchus, Medea, Golden Bronze, and Giant. An overflow had to be accommodated in the asparagus bed and along the other side of the walk.

In the perennial border the stately Delphinium asserts its glory and Madonna Lilies lift their pure, sweet-scented cups

To find room for so many varieties, a very satisfactory plan was hit upon. Instead of planting the bulbs with a dibble six or seven inches apart, a tiny bed for each collection was excavated to a depth of seven or eight inches. After the ground had been properly fertilized with bonemeal and loosened up, it was filled in with surface soil to a depth of five inches. On this the bulbs were set from four to five inches apart and the space filled in. Tulips cut from these collections succeeded in winning many prizes at the show. To clothe this spot, after the flowering of the Tulips, annuals were used and were grown in scallops running irregularly into the border. Last year these included Red Riding Hood Dianthus, a dwarf variety of Coreopsis, Rosy Morn Petunia, and Sweet Alyssum.

A very pleasing effect has been obtained by the planting of the Poetaz Narcissus through-

Blue Spruce and Peonies in a pleasant, sheltered corner of the little garden

out the whole border. It also bears at tulip time a delicate blue shade from the Mertensia or Virginia Cowslip which comes up year by year without attention and passes out of sight soon after its glory has departed.

The Peonies in the border include Mons. Jules Elie, Sarah Bernhardt, Madame Emile Lemoine, and of single varieties The Moor and Tokyo. The remaining cultivated portion of the garden is devoted chiefly to Peonies, Roses, Iris, and the Gladiolus. Skirting the walk are half a dozen varieties of the Peony, including La France, Walter Faxon, Adolphe Rousseau, Solange, and Albatre. A tiny bed in another part of the garden and a space against the east side fence are occupied by August Vallaume, Baroness Schroeder, Marie Crousse, Festiva Maxima, Edulis Superba, and Felix Crousse.

IT WAS the Roses, however, then at the height of their blooming, that most charmed our visitor. These include upwards of a score of Hybrid-perpetuals and Hybrid-teas, both bush and standard form, besides the Climbers on the arch and the boundary fence. The Roses occupy a double row following the curve shown in the illustration, and include: Gorgeous, Lady Ursula, Jonkeer J. L. Mock, Willowmere, Mrs. John Laing, Frau Karl Druschki, Grüss an Teplitz, J. B. Clark, Victory, Alfred Colomb, Mrs. Henry Morse, Ophelia, Arthur Goodwin, Madame Colette Martinet, C. V. Haworth, Princess Victoria, and Madame Edouard Herriot. From the middle of June until the gardening season is brought to a close, Roses are constantly in bloom.

The Climbers, too, were carefully chosen and have paid well for the trouble of doing so. Tausendschön, occupying one side of the arch, is a magnificent bloomer, bearing thousands of blooms of the daintiest shade of pink and white each season. Its companion is Dr. W. Van Fleet. The other varieties are American Pillar, Excelsa, and Dorothy Perkins. The Crimson Rambler, because of its susceptibility to mildew, has been cast out root and branch.

Many gardeners decline to grow Roses from the mistaken idea that it is impossible to keep the plants free of insects and disease. The occasional use of a hand sprayer for insects and a bellows blower for the sulphur and arsenate of lead mixture to control mildew and spot, keeps the Roses clean and presentable. The use of these is not an unpleasant job.

THE Gladiolus has been responsible for increasing the family budget for "green-groceries." The appeal of the newer varieties has almost wiped out the annual crops of vegetables. The Gladiolus are grown in prosaic lines and are given practically the same cultivation as were the Tomatoes, Carrots, and Beets in their day. No high-priced varieties have been grown, but what may happen in the future is unsafe to predict. Those grown last year included Peace, Loveliness, Le Marechal Foch, War, Mrs. Pendleton, Red Emperor, Mrs. Francis King, and some seedlings from Kunderd stock besides such primulinus varieties as Alice Tiplady, Salmon Beauty, Myra, and Souvenir.

ALL of the spare time of the proprietor has not been required for the cultivation of this garden. Daylight saving has afforded a reasonable time for golf. At the end of the flowering season practically all in the fertilizing for the year is done. A liberal dressing of well-rotted stable manure, preferably from a dairy farm, is dug in to the main portion of the garden, while the perennial border receives a coat of the finest of the supply. So full has this bed become of bulbs and roots that digging is no longer practicable. The only cultivation in the border that is possible is done with the Dutch hoe. With this and hand weeding, aided by a small weeding tool, the border is kept in a presentable and thriving condition. A little extra fertilizer is used on the rose bed when the first buds appear. Pulverized sheep manure and bonemeal raked in at that season provide a stimulant that brings its response not only in fine bloom, but luxuriant foliage and wood growth. Only in times of continued drought is artificial watering done to any extent. Frequent cultivation after rains, and thorough soakings when watering is needed, give better results than the daily waterings practiced by many gardeners.

What to do with the shady spots that seem unavoidable on small city lots, more particularly between the houses, is a worry to many who would have nice grounds. The Tuberous Begonia has settled the problem for this garden. Very good satisfaction has been obtained year after year by growing ordinary single varieties in their various colors. A year ago a collection of frilled and double sorts interspersed with Ribbon-grass gave added charm to the Begonia bed.

The shrubbery was carefully selected. The Lilacs Charles Joly, Madame Lemoine, and Charles X, very fine double varieties, add charm during their blooming season. These, with a Colorada Blue Spruce, a Chinese Arborvitae, a globosa Cedar, and a plant of Hydrangea paniculata grandiflora, lend a landscape decoration to the grassed part of the garden.

Nor has the front of the house been neglected. A bed of polyantha Roses is constantly in bloom after the first flowers appear in July. These, interspersed with Petunias one season and Fuchsias and other things in other years, make a charming spot on an otherwise unattractive city street.

ENCHANTMENT

IRENE AVERY JUDSON

THE garden folk are winsome, the garden folk are true,
Each dainty stem and chalice holds charms forever new;
And souls that thirst for solace, and souls that long for rest
Can find in flower faces fair
That hide in quiet places fair
With quaint, appealing graces fair—
A peace the gods have blest.

The garden folk are blithesome, the garden folk are gay:
Through each silken petal the glist'ning sunbeams play,
And happy hearts and buoyant that fling aside all care
Rejoice in the dashing hues,
The boldly flaming, flashing hues,
The rioting and splashing hues
That laughing flowers wear!

The garden folk are mischiefs, the garden folk love fun:
Around each fragrant blossom that, smiling, greets the sun
Is thrown a lovely mantle, invisible but strong,
That coaxes all eyes, holding them,
Enchants vague longings, molding them,
Enslaves great hearts, enfolding them,
And fills men's souls with song.

H. Shobbrook Collins, Photo.

TO-DAY'S KITCHENS ARE CHEERY AND COMFORTABLE

All the furnishings of this small kitchen were chosen with an eye to both serviceableness and pleasant effect. Equipped by Margery Sill Wickware, Decorator, for the "Exhibition of Beauty and Economy in House Furnishings" on view at the New York Art Center until September fifteenth (see also pages 22, 23)

PERFECTION IN THE LITTLE HOUSE

I. Equipping the Kitchen for Easy Housekeeping

PHIL M. RILEY

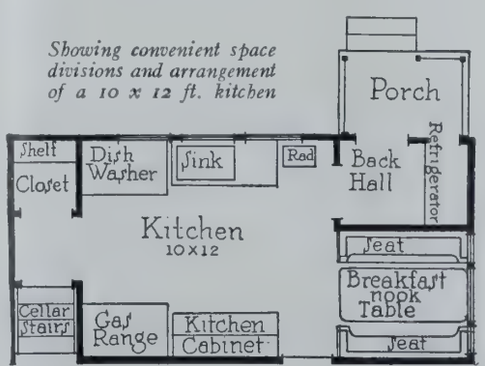
Photographs by courtesy of the Art Center, Hoosier Mfg. Co., Wasmuth-Endicott Co., Chambers Mfg. Co., Hamilton Beach Mfg. Co.

THE kitchen has been aptly termed the "workshop of the home." Upon the completeness of its equipment depends the comfort and contentment of the housewife or her maid, all of which is worthy of serious consideration by the "master" of the house.

The essentials of kitchen equipment may be briefly enumerated as the range, sink, table, closet, often a kitchen cabinet replacing the old-fashioned pantry, and as frequently shelves and glazed cupboards replacing the so-called butler's pantry. To these has more recently been added the breakfast and luncheon nook.

This is only the beginning of the story. But before developing it further a few words may well be said about the kitchen as a room and its finish. It ought to be of sufficient size, say 10 x 12 ft., light and airy, with not less than two windows, one over the sink, and providing cross drafts in summer if possible. Light tone painted walls and ceiling are best as they may be washed. Hardwoods, hard pine, or linoleum provide good floors, but terrazzo, tile, slate, or rubber are better. Rubber and terrazzo, respectively soft and hard type floors, with a baseboard of the same material joined to them, are perhaps the most waterproof and sanitary.

Showing convenient space divisions and arrangement of a 10 x 12 ft. kitchen



LIGHTING AND HEATING

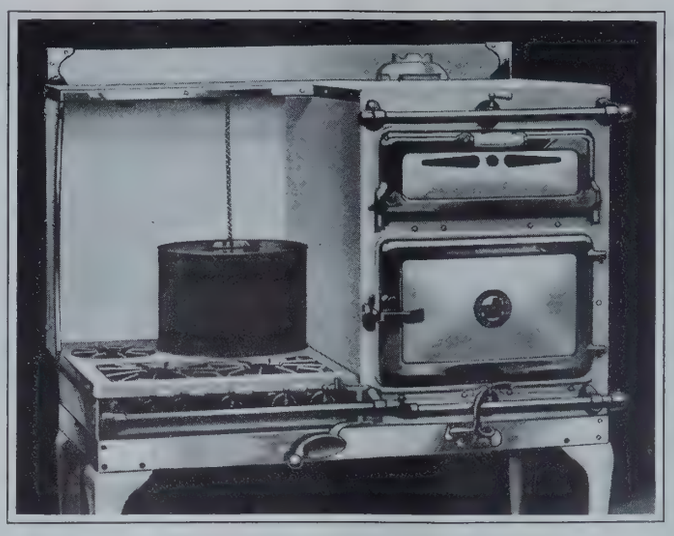
PLENTY of well-diffused light is essential to the kitchen workshop. It can best be secured by using an enclosing globe, diffusing glass or a totally indirect luminaire. All metal parts should be finished in white enamel. A wall bracket with direct lighting type of glass reflector is useful over the sink.

The gas kitchen is now the rule, although some still prefer coal, especially in autumn,

winter, and spring when the extra heat radiation from a coal range is welcome. Such persons are well served by combination gas and coal ranges. Others prefer the typical gas range, usually with four open burners, an oven and broiler. It is obtainable in several good makes in black or white enamel as desired with nickeled trim. Thermal regulators automatically keep the oven or broiler at any desired temperature, and the construction is such that heated fresh air is circulated through the oven in a manner to maintain uniformity of heat.

In communities not provided with gas service, blue-flame kerosene oil stoves furnish an efficient substitute. They supply a quick, economical heat, are of attractive appearance and as readily adaptable to every cooking need as a gas range.

Open plumbing is as much to be desired in the kitchen as in the bathroom and a white porcelain enamel sink is superior to any other.



COOKING WITH THE GAS TURNED OFF

An up-to-date device for eliminating waste of gas and effort and for conserving the juices in meats, etc.; the Thermadome continues cooking on retained heat for hours after the flame is turned off

FOR THE SMALL KITCHEN

In many kitchens where there is no room for the full-sized cabinet, a table of this type (with conveniently attached swinging stool, metal-lined bread box, bread board, meat chopping block and bracket for the meat grinder) proves most serviceable

Never make the mistake of getting one too small. Comfort demands one 36 inches high and 2 x 5 ft., three feet of the length being sink proper and the other two feet a corrugated draining table.

Many items of kitchen routine call for a sturdy table with drawer of good hardwood or metal, preferably white enameled, and placed either in the center of the room or in a convenient wall space.

The floor plan should provide a kitchen closet of good size with hooks and shelves for storing scrub pails, brooms, brushes, carpet sweepers, vacuum cleaner, cleaning fluids, polishes, scrub and dust cloths, ironing board and other miscellaneous articles.

SOME SERVICEABLE SPACE SAVERS

OLD-FASHIONED separate pantries, the culinary departments of a former generation, have become almost a thing of the past, having been replaced by the modern kitchen cabinet or dresser. With its numerous cupboards, shelves, drawers, and mixing table it provides a complete pantry and supply storage in the kitchen for the average home. Constructed of steel or wood and white enameled, it is a neat, sanitary, and labor saving item of kitchen equipment. Some of the larger kitchen cabinets also replace the so-called butler's pantry. Otherwise in the absence of such a pantry a kitchen wall cabinet with glazed or wood door, cupboards, and drawers beneath may be desirable for extra dishes, staple food supplies, towels and table linen not wanted in the dining-room.

One of the latest aids to housekeeping, especially to the housewife doing her own work, is the breakfast nook, also convenient for luncheon, which saves time and steps for hasty meals and avoids cluttering up the dining room. It consists of a rectangular built-in table, usually opposite a window, and built-in benches or high-backed settles seating two or three persons on opposite sides, the whole occupying a separate adjoining room or a jog of the kitchen. Where space is limited, both table and benches are sometimes made to fold into wall panels when not in use as in the "invisible" dining rooms of kitchenette apartments.

TIRELESS "MAID OF ALL WORK"

"Economical and with a prodigious capacity for chores of many sorts, such as sharpening knives, polishing silver, whipping cream, etc., the utility motor is a veritable maid of all work without which no modern kitchen is complete"

QUICK AND CLEAN ELECTRICAL DEVICES

THIS is an electric age, and much of the equipment which makes kitchen work easy and enjoyable is electrically operated. The list usually includes a number of the following items: electric range and miscellaneous cooking appliances, dishwasher, exhaust fan, electric iron and utility motor.

Electric ranges are the aristocrats of kitchen cooking equipment, although necessarily expensive to buy and to operate for general use except in localities where a special low power rate is obtainable. For that reason their use is confined chiefly to places where gas is not obtainable and blue flame kerosene stoves are not wanted. Combination ranges are now made, however, for the use of electricity in summer and coal in winter, or both at any time. An electrical adaptation of the fireless cooker also serves many purposes economically.

Special wiring is needed for electric ranges. For other cooking appliances a sufficient number of convenience outlets properly located in surbase or baseboard should be provided in the wiring plan, into which the various appliances may be plugged as needed. These other cooking appliances include grills, or table stoves, hot spots for cooking heat of any sort, toasters, coffee percolators, tea samovars, waffle irons, chafing dishes, egg boilers and all such devices as are intended for the dining room or breakfast nook in the kitchen but are often used on the kitchen table as well.

It is a psychological fact by no means peculiar that the average housewife enjoys getting the meals but abominates washing the dishes afterward. Indeed, dishwashing by the old-fashioned method is one of the chief items of household drudgery. An electric dishwasher costing very little to operate eliminates all this. With it, unless the family is large, the dishes need be washed only once a day. After each meal they may be placed in the racks provided for them and at night the dishes for three meals washed simultaneously without effort in about five minutes. They are allowed to drain in the open washer over night and are taken out dry in the morning, making room for the next batch.

Several good dishwashers are on the market, the best type, perhaps, taking the form, when

no modern kitchen is complete. Of small size and economical, it has with its various attachments a prodigious capacity for work of many sorts, such as sharpening knives, polishing silver, whipping cream, mixing cakes and dressings, running sewing machines, etc.

The refrigerator is properly classed among the principal items of kitchen equipment, although ice economy usually relegates it to the pantry, or better still to the back hall away from the heat of the range, where it may be supplied without entering the kitchen. Refrigerators designed for outside filling are still better. Best of all, however, is electrical refrigeration, provided by a simple, compact device operated from ordinary home current. It can be installed in any ice-box in a few hours, eliminating for all time the muss and nuisance of ice delivery. Not only does it keep food in a safe, healthful condition, but it freezes pure drinking water into crystal cubes of ice for table use.

In selecting a refrigerator insist on a high-grade standard make of ample size, preferably white porcelain or enamel lined and designed to maintain dry cold without dampness in the food chamber. This is assured by openings so arranged in the interior partitions as to convert the falling cold air and the rising warm air into a perpetually moving current.

A quick, ample, economical supply of hot water is as essential in the kitchen as in the bathroom. In cold weather it may be supplied by the well-known expedients for making the fire in the heating boiler, furnace, or kitchen range do double duty. For year-round service, and especially for summer service in the case of all-gas kitchens, gas water heaters are the best available equipment. Instantaneous heaters which automatically heat water as it is wanted when a faucet is turned are preferable but somewhat extravagant in gas consumption. In the country, or wherever there is no gas service, blue-flame kerosene heaters are excellent and nearly as quick as gas.

THE NEW-FASHIONED PANTRY

The modern kitchen cabinet or dresser with its numerous conveniences and neat, sanitary appearance is a compact and most satisfactory substitute for the waste spaces and somewhat hap-hazard arrangements of the olden-time pantry

closed, of a white enameled kitchen table and so having a double use.

Ventilation in the kitchen to force out smoke, heat, and hot air and draw in fresh cool air without the annoyance of drafty open windows in autumn, winter, and spring, makes for comfort and cleanliness. A little electric exhaust fan located high up in any convenient window accomplishes this as silently and efficiently as the ordinary household electric fan produces a refreshing breeze.

While an electric iron is classed as laundry equipment it is used fully as much in the kitchen for miscellaneous small pressing, where it is plugged into a convenience outlet near the kitchen table or place where an ironing board can be set up.

TIRELESS "MAIDS OF ALL WORK"

THE utility motor, similarly plugged into any convenience outlet or lamp socket, is a veritable maid of all work without which

SAVING YOUR PEACH TREES FOR 3 CENTS EACH

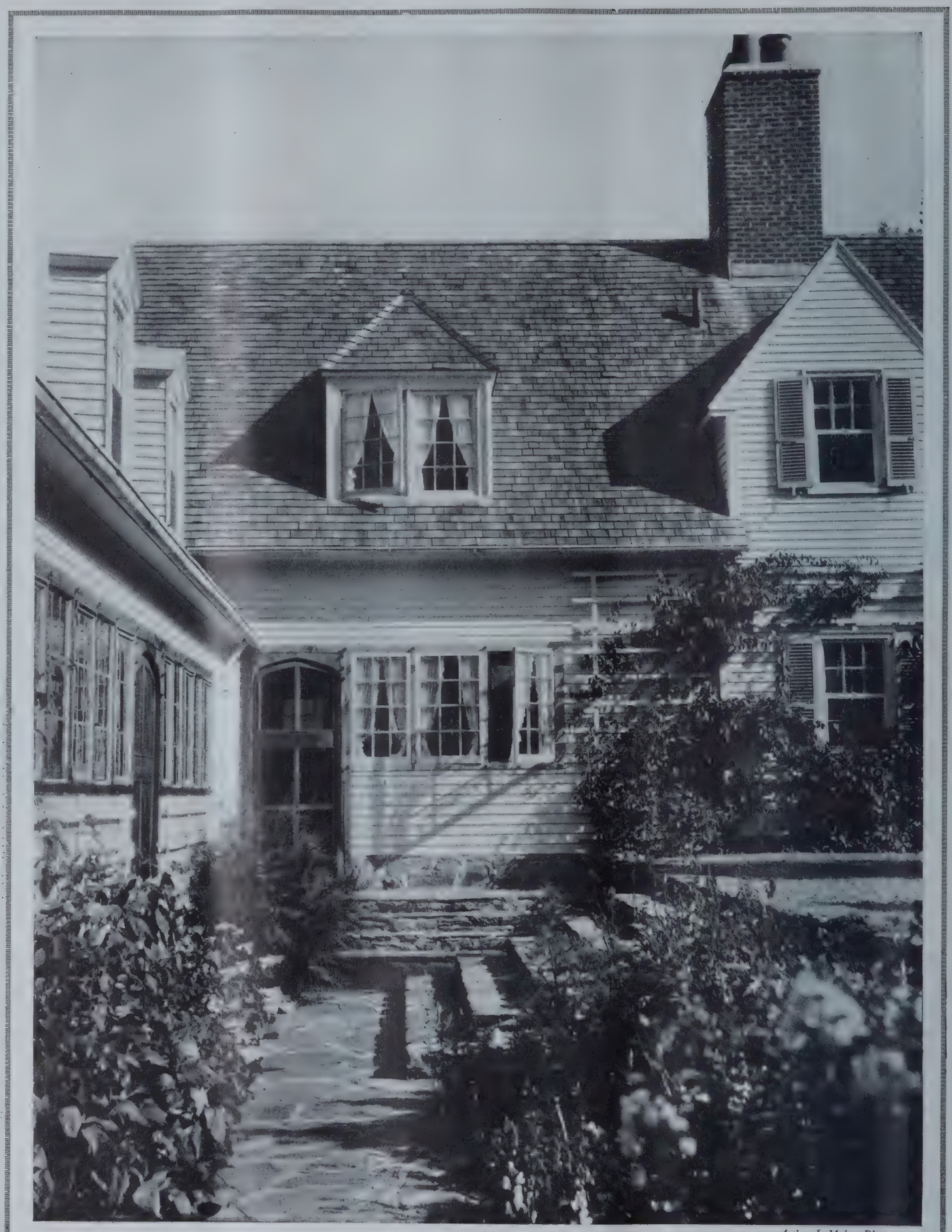
FOR the past two or three years, entomologists at the New York State Agricultural Station at Geneva have been conducting very successful tests with paradichlorobenzene.

When this chemical compound first came into use for gassing Peach tree borers, three years ago, August was thought to be the best time but T. H. Parks, extension entomologist at the Ohio State University, advises September or early October, not too late in October, as there must be sun enough to vaporize the powder, and allow the heavy gas to seep down into the ground, asphyxiating the borers.

The preparation comes in the form of crystals which are quite volatile and give off a characteristic odor. Late in the summer any weeds or grass growing around the crown of the Peach trees which are to be treated are removed and not more than $\frac{3}{4}$ oz. of the crystals placed in a ring about the tree. The soil is then drawn over the crystals and banked up slightly about the tree. The gas which is given off from the crystals penetrates the burrows of the Peach tree borers, killing the young borers. Trees which have been treated for two and three successive seasons show no ill effects from the use of the chemical, but trees less than six years old should not be treated with paradichlorobenzene, according to Prof. Parks.

Among commercial peach growers in the East and South, paradichlorobenzene has all but done away with "worming" the borers out with a knife, a tiresome and only half effective method.

All of those who have given the new chemical trial according to directions report around 90 per cent. borer control, at a cost of but 3 cents a tree, and without any discernible damage to young trees.



Arthur I. Meigs, Photo.

HOME OF MRS. ANTELO DEVEREUX

At Dark Harbor, Maine

Arthur I. Meigs, Photo.

Carrying on the best New England tradition and yet with a twentieth century vigor of rendering, this pleasant-faced house seems comfortably settled among the Pines of Maine. Entrance to the living-room at the home of Mrs. Devereux; a view of the guest entrance is shown opposite. Mellor, Meigs & Howe, Architects

THE HOUSEWIFE & HER HOME GARDEN

ELLEN D. WANGNER

The Value of Nuts on the Daily Menu—Growing "Meat" in Your Own Garden

EDITORS' NOTE: The garden is, of course, not merely an outdoor plaything but an integral part of the household's life, contributing not only diversion but often a very substantial share of the day's menu. The most carefully raised vegetables, the most delicious of fruits, the loveliest of flowers may come to naught through careless or ignorant handling by those indoors, thus nullifying the gardener's best efforts and completely discouraging their renewal.

Intelligent housewifery is the garden's best ally; therefore we take pleasure in announcing the establishment of this department which will include matters of specific interest to the "lady of the house"—Recipes, articles on Flower Arrangement, Table Decoration, Food Values in Relation to Family Health, and all the diversified activities and interests of a competently run ménage in whose success the garden is an important, if silent, partner.

ALMOST delicious food and one too infrequently seen *as food* on the average table is *nuts*. Most housekeepers think of nuts merely as attractive additions to salads and desserts or as sandwich fillers. What many fail to realize is that nuts furnish all of the vitamines, fats, and proteins belonging to the meat group of foods, as well as starch; and all this in a concentrated form.

Now this does not mean that a delicate nut croquette would be as satisfying to a healthy, hungry man as a thick steak. But it does mean that if nuts are combined with corn, rice, bread crumbs, hominy, cabbage, potatoes, tomatoes, etc., the result would be the desired fibre and bulk furnished by meat, as well as the fats and vitamines. As a substitute, therefore, to provide the food-value of meat without the harmful effects produced by eating too much meat, nut dishes should be part of the menu of every careful housewife who has the health of her family at heart.

NO LESS an authority than Dr. Robert T. Morris, the well-known surgeon, says in his book on "Nut Growing," that "our next great meat supply stands all ready to be released. Were wheat, corn, rice, and other grains suddenly to be stricken from the earth, man might live better than ever before. Nut crops with their large average yield per acre (and with less labor) would furnish more of the food-essentials than are to be obtained from grain. And nut trees may be grown upon almost every habitable acre in the temperate or tropic zones."

There stands an available meat supply rich in its possibilities of development, ready to feed us when the vast herds are gone from the grazing-grounds and the grounds themselves turned into suburban lots. "Even land now deemed waste," says Doctor Morris, "may be made to produce more food than has commonly been produced on soil considered of highest grade. Grain crops require untold labor, but the nut tree works night and day with less attention from man than plants require."

The subject of growing nut trees—as is most evident—is one that should interest every owner of even a small piece of ground. Nut trees do not belong to a highly specialized, mysterious form of gardening. Science has shown that the planting, grafting, and care of such trees is as simple as that required by an Apple tree. In fact, nut trees will thrive even if neglected where an ordinary Apple tree would deteriorate. Let us remember, too, that nut trees are not only easily grown but that they are as ornamental as the shade trees and that they supply both food and shade.

As to the kind of land necessary for their cultivation, the gardener has but to realize that, as yet, they may be considered "wild trees" and not the result of centuries of cultivation and that the chief requisite is soil similar to that of their native woods. It must be remembered too that different nuts grow best in different parts of the country. A rough sectional outline given by Doctor Morris suggests the Pecan for the South, the Shagbark (Hickory) for the Northeast, Black Walnuts for the Central West, and Persian Walnuts for the Pacific Coast.

It is most gratifying to learn that the Federal Department of Agriculture has become intensely interested in this subject and that associations of nut-growers have been formed. The Northern Nut Growers Association, the Western Walnut Association, and the California Walnut Growers Association are rendering particularly timely service in compiling cultural information and in developing lists of reliable varieties of trees.

IN ACTUAL food value 1 pound of walnut meat is equal to 5 pounds of eggs, 9½ pounds of milk, or 4 pounds of loin of beef. We may prefer the eggs and beef—and most of us do—but we are grasping more understandingly each day that as we eat, so we are, and that too much meat (and the majority of us *do* eat too much) is the basic cause of rheumatism and a long string of ills, unless our work requires a great deal of physical exertion.

If we be office folk, we would do well to get away from too many thick porterhouse steaks and try, instead, an occasional nut-dish. Especially for luncheon or Sunday night supper they are most attractive, and it is comforting to know that they give just the right amount of muscle-building, energy-producing foods without obliging us to eat too heavy a meal.

One reason why "nut cutlets and roasts" do not appeal is because they are not properly prepared, flavored, or seasoned. This does not mean with plenty of pepper but it does mean the right amount of poultry dressing, onion, parsley, etc., to make the dish appetizing. Another point: before using nuts in any meat-substitute dish they should be browned. This is easily done. Shell and blanch them by covering with boiling water. When cool, slip off the husks; then put in a pan in a slow oven to toast. If the nuts are to be used at once, a little butter or salad oil may be put in the pan. Without this fat, the toasted nuts may be kept in a jar ready for use. Peanuts may be made delicious by blanching them, removing the husks and, when dry, plunging in a small basket into deep fat. They will double in size and be most tempting.

THERE is a very illuminating chapter on Meat Substitutes in the comprehensive recently published "Book of 2500 Recipes" by Mrs. Ida C. Bailey Allen ("Mrs. Allen on Cooking, Menus, Service") who has gathered much material of value to housewives out of a long practical experimentation both in her own kitchen and as Food Editor of "Good Housekeeping," "Pictorial Review," and the "Woman's World." Of the nut recipes included in this chapter two (Nut Loaf and Nut Cutlet) are reprinted below.

Nut Loaf

1½ cups ground mixed nuts
2 cups stale bread crumbs
1 egg
1 teaspoonful poultry seasoning
½ cupful water
1 tablespoonful ground onion
¼ teaspoonful pepper
1 cupful evaporated milk
1½ teaspoonfuls salt

Combine the ingredients in the order given, mixing thoroughly. Let stand for twenty minutes, then pack into a bread pan which has been rubbed with vegetable oil. Bake 45 minutes in an oven at 375° F. Serve with either a tomato or white sauce.

Nut Cutlet

1½ cupfuls finely chopped nuts (any kind)
1 cupful winter squash (cooked soft)
1 cupful mashed potatoes
½ cupful fine dry bread crumbs
1 tablespoonful hot milk
2 tablespoonfuls butter
1 egg
1 teaspoonful salt

Combine the ingredients as enumerated and let stand thirty minutes, then shape into cutlets, dip them in fine bread crumbs, then in a slightly beaten egg diluted with one-fourth cupful of milk and then again in bread crumbs. Fry in deep fat, hot enough to brown a bit of bread in forty counts, 375° F. Serve with white sauce or brown nut gravy.

Bran Nut Bread

¾ cup sweet milk
1 cup of bran
¼ cup brown sugar
½ cup water
1 teaspoonful salt
½ cup English walnut meats chopped
¼ cup molasses
2 teaspoonfuls of baking powder
½ cup of raisins

Mix sugar, milk, and molasses together, sifting the dry ingredients into this mixture, dusting the raisins and nut meats with a little of the flour. Pour into a buttered bread pan and bake slowly for two hours.

Nut Cookies

1 cup sugar
2 eggs
2 cups of flour
2 cups (mixed) of raisins, currants, dates, and nuts
¾ teaspoonful of soda
½ teaspoonful nutmeg
1 teaspoonful salt
1 cup butter
¾ cup of milk
2 cups uncooked oatmeal
1 teaspoonful cinnamon
½ teaspoonful cloves (ground)

Cream butter and sugar, add well-beaten eggs. Add spices and salt and raisins, nuts and currants, etc., to the flour and oatmeal, then mix this with the batter. Drop from a teaspoon on butter tins, and bake in a hot oven until crisp and brown—about 15 minutes.

Nut Squares to Serve with Ice Cream

1 cup of sugar
1 tablespoonful of flour
2 teaspoonfuls of baking powder
1 cup chopped dates
2 eggs (separated)
1 cup chopped walnut meats
1 tablespoonful lemon or orange juice

Beat white and yolks separately, combine and add sugar and orange juice. Sift baking powder, nuts, and dates with the flour. Mix all together, place in a shallow, well-greased pan and bake in a slow oven 25 minutes. Cut in squares.

Chocolate Nut Bars

½ cup melted butter
1 cup sugar
2 eggs beaten
2 squares of chocolate melted
½ cup of flour
½ cup chopped nut meats
1 teaspoonful of vanilla

Mix all together and spread thin in well-greased tins. Bake slowly in moderate oven. Cut into bars when cool.

IF YOU WANT TO GROW NUTS

NOTICE has come from Dr. Robert T. Morris of the meeting on September 3rd, 4th, and 5th of the Northern Nut Growers Association in the museum building of the New York Botanical Garden, Bronx Park, New York. Any one who is interested in obtaining information in relation to nut growing may attend the sessions. The first day will probably be devoted to the reading of papers and exhibition of lantern slides. A part of the second day will be devoted to papers and an excursion to Baldwin, Long Island, to examine the experimental work of Mr. Willard G. Bixby. On the third day there will be an excursion to Doctor Morris's grounds at Stamford, Conn., for the purpose of looking over the results of experimental work which has been conducted there. Copies of the final programme may be obtained upon application to the Secretary, Dr. W. C. Deming, 983 Main Street, Hartford, Conn.

Doctor Morris also states that although nut orchards are furnishing fine incomes for horticulturists in the South and on the Pacific Coast, we are still importing more than a million dollars' worth of nuts per year, almost all of which could be raised in this country; and that the growing of grafted nut trees does not differ materially from the growing of fruit trees in general. They also have the added advantage of being for the most part longer lived than other fruit trees and the nut crop does not require gathering with feverish haste in the autumn. Growers of fruit trees are constantly confronted with this problem in these days of shortage of labor. Grafted nut trees of various kinds come into bearing as Apples do, some varieties beginning to bear in the second year after grafting or transplanting, although profitable bearing, as with Apples, usually means several years later.

In the northeastern part of our country horticulturists and farmers have been a bit behind the times although grafted and cultivated Shagbarks, Black Walnuts, Hazels, and blight-resisting hybrid Chestnuts would allow many a man to raise the mortgage on his property and free him from the shortage of labor problem.

GAMBLING IN ROSES

GROWING climbing Roses from seed is an interesting pastime and easy as "falling off a log" if only a little patience is used. I am waiting in the hope that some of our rosarians will turn out more of the large-flowered Climbers as fine as American Beauty, Doctor Van Fleet, and Silver Moon. I'm planting seeds of these whenever I can find a hip that forms to see what I can get.

I now have ten Climbers from seed which should bloom another year but they are of Hiawatha, Tausendschön, and American Pillar. The first of these seedlings to bloom spun right up to a tiny bud from its seed leaves, flowering when only three inches high and two months old, and has never done anything else since. Every branch has terminated in buds and it bloomed all last summer (1923), its first, and continued this summer forming a little bouquet of apple-blossom-pink Roses about two inches across, the buds being a bright pink and unfolding into glistening white blooms. It hasn't shown the slightest symptom of climbing so far although the other seedlings from the same batch have four or five feet of growth. From its behavior last year I treasured the hope I had a really ever-blooming rambler but now it looks like a "baby rambler." If it maintains its present disposition it will be a very showy bedding Rose. I don't care what it does, whether it rambles or remains dwarf so long as it keeps up its persistent blooming habit.

The method of starting climbing Roses from seed is simplicity itself. Some I start in a coldframe if I'm particular about them, the others in the open ground. They seem to do as well one way as the other, the coldframe being used so I'll be sure they won't be lost or neglected.

In the fall when the hips are bright scarlet and ripe but before they harden, pick them, split them open and remove the seeds. Plant about half an inch deep and two inches apart and along in the spring or early summer, the little Roses will appear. Germination is uneven and some come up early; others may delay a month or so or even wait over a season but there will be a majority appearing along in May or June, according to my experience. You may get something good or you may not. It's a pleasant gamble!

SHERMAN R. DUFFY.

M. Parker Rolfe, Photo.

WHERE THE SPIRIT OF THE GARDEN LEAVES ITS IMPRESS

As the big outdoors recedes more and more from our doorsteps we are capturing what remains of sunshine and garden gaiety and incorporating it into our daily living and nearly every modern home builder finds the sun room as indispensable as the garage

BUILDING TO CATCH THE SUNSHINE

SARA H. BULLOCK

Author of "An Hour a Day Garden," January, 1923, Garden Magazine

The Sun Room as a Link Between Outdoors and In Giving Garden Gaiety for Bleak Seasons and a Cool Refuge from Summer Heat

I WOULD like everyone I care for to have a sun room, flooded on bright winter days with sunshine which clears the cobwebs from the brain and gives rest and peace; on dull days with a big fire upon the hearth. One feels so grateful for such a cheery place to sit, surrounded with plants and flowers, cozy and oblivious to the bleakness outside; and best of all in a storm, especially a snow storm, you have the luxurious sensation of being at a southern resort safely beyond the chill clutch of "the frozen north." A room of this description has endless possibility and interest and only one disadvantage, you find yourself and your family and all your friends gravitating to this one spot and the rest of the house unused.

Fortunately, almost every one can have a

sun room of some sort, whether simple or elaborate. Many town houses have a back building which does not extend higher than the second floor and which can easily be added to and made into a delightful room having at least two sides of glass or possibly three. In the country the enclosed porch is rapidly becoming an indispensable feature of most homes.

The sun room I have just now particularly in mind (see accompanying picture) is one of the last mentioned type; it is beautiful, restful, and a continual joy. Contrary to all advice this sun room, twenty-three feet deep and nineteen feet wide, was added on to the north side of the house. The entrance is through French windows leading from the living room; you step down two steps, which gives an intimate feeling. At the north end which you face as you enter is the fireplace. There is a stone coping two feet high all around the room, matching the outside porch, and a red tile floor; the ceiling is rough cream-colored plaster and the fireplace matches the coping, the one side wall being of Pennsylvania stone.

The owner's idea is to keep it from being too much of a room and as nearly like out-of-doors as possible. There are a few black and white Navaho rugs on the floor, three to be exact; the furniture is wicker painted a soft green with antique finish. By way of variation a couple of chairs and a chaise-longue are painted black and the two old benches pushed back against the windows are finished in soft green paint with fruit decorations. Plants and a couple of black lacquered pieces give the finishing charm. Curtaining of a yellow-brown sunfast material blends with the oranges on the soft green linen chair covers and in autumn with the turning leaves of trees just outside the windows. In winter the sun streams in the east windows during the morning and as the days get longer it shines more and more through the west windows by afternoon. But no matter what the day or the time of year this room is always pleasant and restful—a place you want to go to and do not want to leave, a place where your happy thoughts are happier and your sad thoughts a bit less sad—a room that helps!

GROWING PEONIES FROM SEED

SARAH A. PLEAS

PEONY seed will germinate as soon as ripe if given the opportunity, but if allowed to dry and harden they require two or three years, perhaps even more; a fact apparently not generally known for even Prof. Saunders in his interesting and helpful article "What America Has Done for the Peony" (G. M., Sept., 1920) makes the, statement that "Peony seeds do not germinate until the second year."

The only seed-bearing plant in our garden some years ago was The Queen, weighted to the ground with seeds which kept spilling out in little piles, and although we had been told by our florist they would all come single, small, and of poor color we decided to see what they would do. We gathered a pint of these and I did not stratify them until near winter.

When the ground was prepared and planted to early vegetables there were two rows left for the Peony seeds, which, after being sifted from the sand, were drilled in evenly the entire length of the rows.

Had these all lived and the seedlings been properly replanted until of blooming size, they would have covered the farm; but I have been thinning these two rows annually ever since, until I moved to California in 1913. The best kinds were always left where they originated, the less desirable ones moved. Germination was strong, the crimson seed leaves almost touching each other. Fortunately or unfortunately there came a hard freeze the first night they were up, killing the Radishes and every Peony above ground. Not having any great expectations, it was not so much of a disappointment as if it had been early Beans. In that case I would have protected them by a covering of loose earth.

With the first warm days, after the cold wave had passed, a few scattering plants came up again. I also noticed for the first time that for fifteen feet at the south end of the rows, where shaded by a large Plum tree from the warm rays of the sun, the Peonies were now up, and crowded just as the others had been. From these have come most of my best Peonies.

As the seeds are not all ready to gather at the same time, I found it expedient to cut the entire cluster as soon as the first ones browned, to prevent their spilling. As they increase in weight, the tops hang over and often spill their seeds in to the center of another plant—there is where Dr. Edgar Pleas originated, and was not rescued until it had bloomed. I could not believe my own eyes in seeing these bright sunny faces in the very heart of a single deep Rose, nor could the family believe me when I said I knew the clump was dark and single. After a few days the single ones began to open, explaining the mystery.

I feel confident that every seed, left exposed on the ground over winter, whether on dead leaves, in the grass or in the hard walk, will germinate promptly with the first warm days of spring. "Opal" with others was found doing well in the hard walk, was lifted and set in the nearest place possible (among Rose bushes), which proved very favorable and was not lifted until shipped to California.

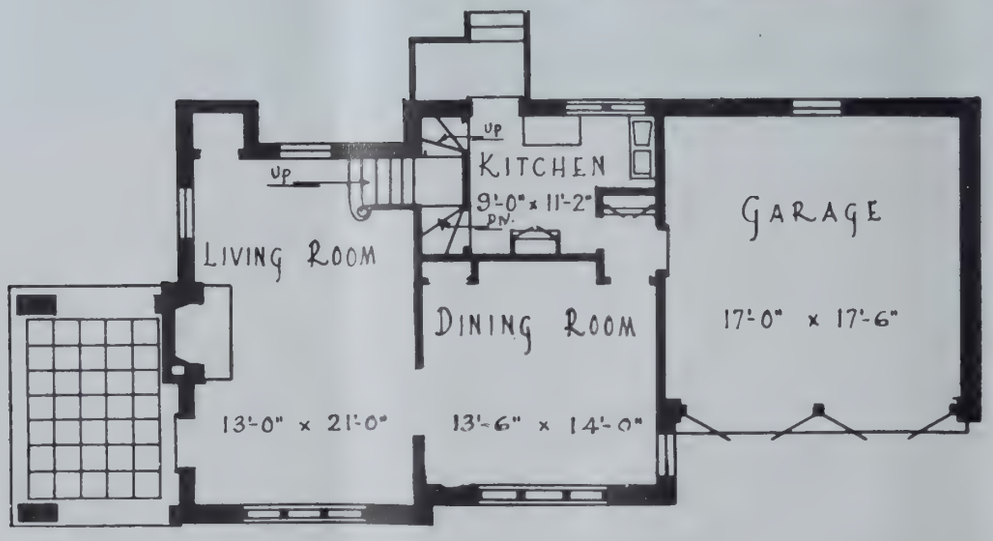
A patron in Tacoma, Washington, writes that he "planted Peony seeds soon as received, and all were winter killed." It is probable that like some of my own they were lifted up by the freeze, breaking their roots, and when the earth thawed and settled back, their blunt ends prevented their settling, leaving them to fall over on top of the ground and perish. Happening out in the garden one February I noticed the broken roots of many three-inch Peonies lying along in the row. Being bright and firm they seemed uninjured. Placing a finger on the broken end of each I thrust it down out of sight in the soft earth, and so far as I knew every one lived. Had they remained exposed until time to garden they might have become so soiled they would not have been noticed.

Since then I have made a practice of mulching all one- and two-year-old plants over winter, preferring bedding from the stable. A heavy blanket of this is a number-one mulch and fertilizer for older plants, to be raked off and forked in before the buds want to push up.

One friend, who is a very careful and close observer and who now has many thousands that will bloom first this year, does not believe the cold hurts plants of any age, but that it is the breaking off. He tells me that he has gone carefully over those with the tops still in place but which appeared wilted, and on lifting them found they were loose.

There is nothing gained by such early planting, nor by fall planting—the winter rains pack the earth so hard that it has to be loosened and weeds come up which must be removed. This requires more time when there are tender plants to be avoided and much more care than to stratify the seed and plant in the spring. If stratified on the north of a building germination is retarded until all danger is passed.

If I were planting seeds now, I would have rows three feet apart, dropping the seed eight inches apart, with Radish seed between. The next spring I would lift out every other plant if needed, and reset in new rows. The third or fourth year I would again lift out every other plant.



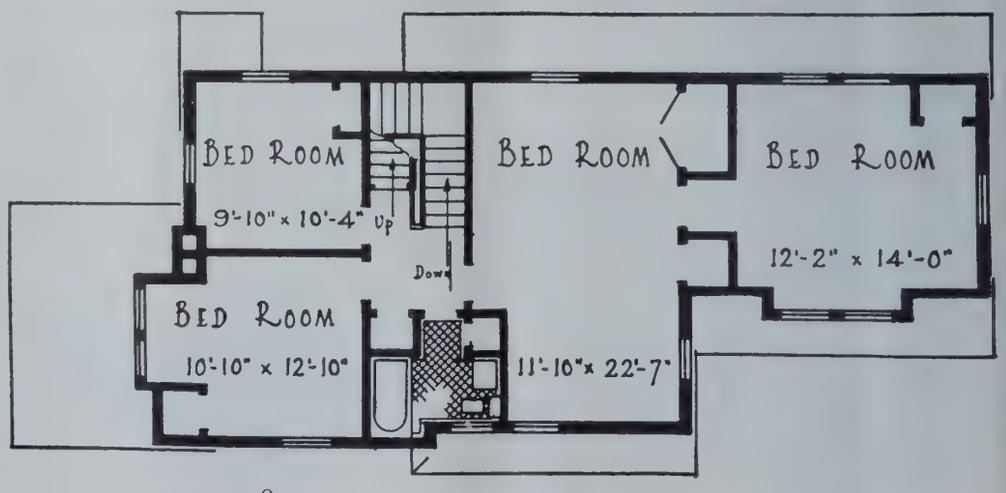
Linking Dwelling and Garage for Economy of Space and Best Effect

Photographs by Philip B. Wallace

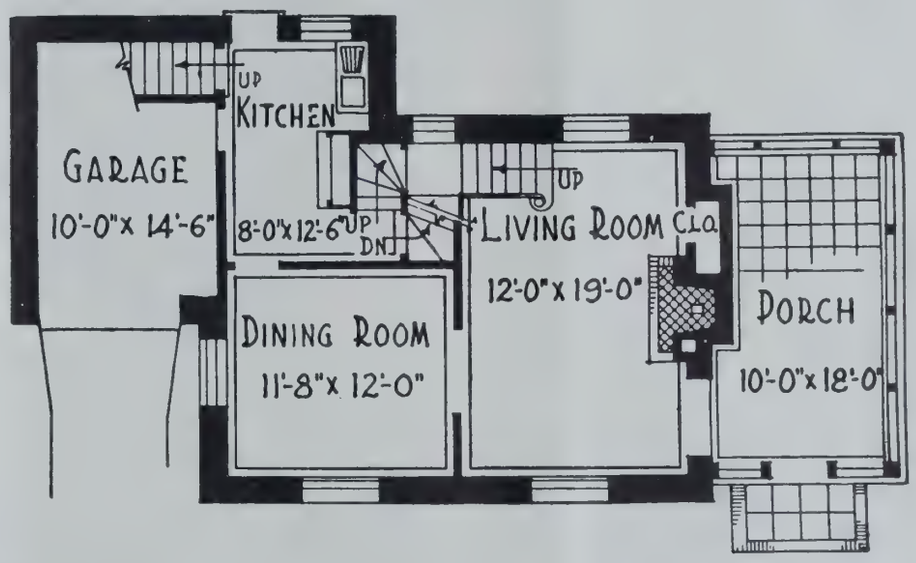
Home of
Mr. Samuel E. Slaymaker, Jr.

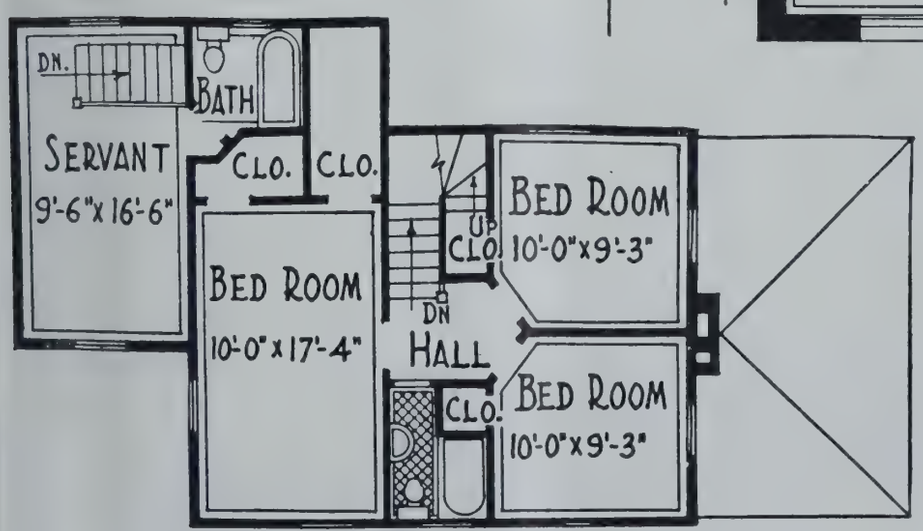
AT HAVERFORD, PA.

Wallace & Warner, Architects



To-day's tendency toward suburban living with its limited land areas is a tax upon the ingenuity of the home builder and one of the happy solutions rapidly finding favor is this uniting of dwelling and garage. Not only does the garden gain by having less broken spaces at its disposal, but the house itself is often improved by the longer roof line; and, of course, such an arrangement not only saves space but also makes the heating of the garage a comparatively simple matter





Home of
Mrs. Ward W. Pierson

AT NARBERTH, PA.

Wallace & Warner, Architects

FINE ART IN GARDEN PHOTOGRAPHY

ELIZABETH LOUNSBERY

The Lure of the Shifting of Lights and Shadows of Outdoors—How Photography Captured the Imagination of Mattie Edwards Hewitt in Her Student Days

EDITORS' NOTE: Many of Mrs. Hewitt's sympathetic renderings of gardens have already appeared on our pages and she holds an established place in the esteem of those readers who care both for fine gardening and fine photography. It is a pleasure to present this brief appreciation of Mrs. Hewitt's achievement and to reproduce on the opening pages of this issue a group of her recently taken pictures of Pennsylvania gardens.

IN THE field of photography which offers to many interesting applications for the camera, there is none in which the soul of the artist is so completely expressed as in garden photography. In this the seeing eye can produce a setting of genuine loveliness, just as the landscape painter transfers to his canvas the beauties of nature. Even the most commonplace flower setting, in skilled hands, can be thus transposed to a picture that loses only in comparison by its lack of color. In contrast to portrait photography on the other hand, it can be made quite as satisfying if it expresses the real feeling of the garden, as the most beautiful phase of an interesting personality.

It was this possibility that led Mattie Edwards Hewitt away from the beaten paths of artistic endeavor, beginning with her early studies at the St. Louis School of Fine Arts, into her activities with the camera. Despite her interest in art as a student and her determination to make it her career, the fascination of her experiments in photography lured her further and further away from her art studies until they were finally abandoned and her attention was completely devoted to photography—animal photography at first. It was not long before the broader scope of gardens and house interiors captured Mrs. Hewitt's interest and with this she ultimately became identified after locating in New York.

Mrs. Hewitt's first important commission, some ten years ago, in this type of work was "Viscaya," the Miami residence of Mr. James Deering. This was quickly followed by work among many of the finest gardens along the north shore of Massachusetts—at Pride's Crossing, Beverly and Manchester—and at Newport, R. I. A great number of large estates in Westchester County, N. Y., and on Long Island, in which gardens play a conspicuous part, were Mrs. Hewitt's next subjects and her recent work around Chestnut Hill, Pa., includes the garden of Mrs. J. Willis Martin and of other enthusiastic garden lovers of that amply gardened region.

The demand for such pictures is constantly growing—builders of homes, architects, and landscape architects find such pictorial records invaluable; owners are proud of their garden successes and want the fleeting beauties of the summer season permanently recorded. And for each one of these uses a specific viewpoint must be considered and different features accentuated.

MATTIE EDWARDS HEWITT
Sympathetic student and renderer of garden beauty

The most interesting phase of garden photograph, Mrs. Hewitt finds, is composition. In this you can place the objective points of your picture against any desired background by putting your camera in an advantageous position thus making it produce, as does the painter's brush, what you will. Here is where the artistic sense and feeling of the operator makes or mars the results. As the camera can only reproduce in black and white and as the beauty of the garden is color, the spirit of the garden must be introduced as a substitute and the photograph be made to tell a story, if it is to be a really beautiful garden picture.

In order to catch the lights and shadows which suggest color and form, the early morning and late afternoon offer the best time of day for this work. The flood of light of mid-day is not conducive to satisfactory results for it completely changes the aspect of the garden which important hint should be borne in mind by the growing group of amateur photographer-gardeners, who so casually "snap" their favorite garden scenes.

In garden photography, Mrs. Hewitt further says, that the most desirable way to treat a garden is against the light in order to show the gradations of color. Where trees or an architectural feature, such as a pergola or pool, are the dominant factors, this problem then becomes simplified.

While the problem of interiors is equally difficult in the matter of photographic lighting, this is solved by selecting the outstanding spots of decoration to sustain the interest of the picture. Indeed the success of a photographic print will continue to hinge upon the manipulation of light for its effects, until such time as printing in color is actually accomplished. Color photography dependent upon autochrome glass plates, mere transparencies and records of color, now offers but a slight resource for outdoor photography.

Possessed of a sincere love of the beautiful in nature and art coupled with a trained eye that both sees and feels, Mrs. Hewitt has been enviably endowed for the work in which she has attained so great a success—a field of endeavor which she considers offers the ideal vocation for women.

AMONG OUR GARDEN NEIGHBORS

Readers' Open Column for Exchange of Comment and Experience

A Happy Result with Larkspurs

TO THE EDITORS:

Thanks be to you! For the suggestion you gave me in the spring I believe I owe the possession of really splendid Larkspurs as I write. Following your advice I used lime in abundance on my Long Island soil where Delphiniums had always been affected by the blacks. They began their bad behavior this year, again, and an appeal to you for emergency aid brought back the suggestion to cut down the diseased growths and feed lime to the roots. I did it, with the result that I have just stated, magnificent spikes with not a symptom of disease.—W. J. N., *Flushing, New York.*

The Garnered Wisdom of a Season

TO THE EDITORS:

"Here's richness for you," exclaimed Mr. Squeers of Dotheboys Hall as he poured out the skimmed milk, and I thought the same thing many times this fall as I thrust my hand into the black leaf mold, and let it dribble though my fingers where it lay in a great pile beneath the screen. There is no secret about obtaining an abundant supply of leaf mold if one has a generous quantity of leaves. There is a secret, of course, but it is Nature's—the mysterious alchemy of sun and rain whereby decay takes so beneficent a form. We do not apply a little slaked lime in our garden nor do we frequently turn the decaying leaves with a fork, nor do we liberally wet them down with a hose as one is so often advised to do by people who have plenty of leisure for gardening operations. Instead we simply build a huge pile in one corner of the vegetable garden in an angle of the wall. All the uprooted annuals and clippings go in this, all the pea vines and "one thing and another." When asked what goes upon the compost heap I think of the guarded reply of a canny dairyman who said when asked what combinations of feed produced such rich milk from his Holstein herd, "Oh, I give them a little of this and that, and I experiment."

This fall we sifted out from the compost heap about a ton and a half of leaf mold. All the borders which had settled a bit were filled in with it. Fall planted bulbs, especially Lilies, had a bed prepared just to their liking. A strip of heavy clay in the vegetable garden was lightened. A quantity was saved to sprinkle liberally over bare spots on the lawns where grass seed is to be sown in the spring. And so it goes. The finest material in the world for gardening waiting to be raked up each fall and yet the streets and countryside are blue with the haze of burning leaves!—HELEN M. SHARPE, *Chambersburg, Pa.*

A Corydalis Seed Source

TO THE EDITORS:

The inquirer in the July issue for information as to where Corydalis seeds or plants could be purchased is advised that our Garden Club last week visited the Detmer Nurseries at Tarrytown, N. Y., and they have Corydalis lutea which Louise B. Wilder in her answer to your inquirer considers one of the two best Corydalis.—ALICE DEAN LANGMUIER, *Hastings-on-Hudson, New York.*

—Thompson & Morgan of Ipswich, England, have the two varieties mentioned as preferable by Mrs. Wilder, also four others, I find.—E. I. G., *Indianapolis, Ind.*

Wintering Hardy Plants

TO THE EDITORS:

Each spring always tells us something new, though it may be old to most other people who study nature at first hand. The wintering of perennial plants is always to be a problem, for the winters with us are so capricious and so changeable. I often find, that we have lost in our garden about as many plants by overprotection as we have benefited or saved. This may be an over-estimate but it is a fact that we find many coverings with nothing left to cover. The fact is that forest leaves are too close and smothery. They always are soaked with water and in that way practically no air gets through them. For shrubs they are all right but for herbaceous plants they are not nearly as good as coarse horse manure. A moderate covering of this, to be left on in spring, is ideal.

I wrote you, I think, of our big Hollyhock. It was a chance plant and had no special care, but it sent up eight stems and produced fully 400 deep crimson flowers. I have always felt that certain perennials are "imperfect" because they are allowed to exhaust themselves by producing seed, so practically every day we cut off all withered flowers, leaving only one on each stem to seed. The result is that the plant came up this year apparently more vigorous than it was last year, while another near by with a better position than this one but which was allowed to seed freely, is dead.

Without knowing how it came about we have a strain of the old-fashioned house Hydrangea that winters freely out-of-doors without protection. I covered one bunch last winter moderately with litter but left two bunches unprotected. All started well with the protected plants a little more forward than the others. They did not blossom, however, and it may be that wintering outside discourages blossoming though it certainly does not affect their growth. I never had any before that were at all hardy. —JOHN W. CHAMBERLIN, *Buffalo, N. Y.*

Bees vs. Birds

TO THE EDITORS:

I have a bird-bath that is a joy of my bird friends and even more so to me. My neighbor has bees and the bees take possession of the bath and drive the birds away. Even the starlings and English sparrows are afraid of the bees. Do you know of anything that could be put in the water to make it unpleasant for the bees so that they would go elsewhere and not be distasteful to the birds, or anything else we could do?—MARY LUCY BANKS, *Hollis, New York.*

A Dozen Dahlias

TO THE EDITORS:

If I had to play Robinson Crusoe and you gave me my choice of a dozen Dahlias to delight my solitude, what do you suppose I would take along? I shall never forget the first time I had Pierrot in bloom in my garden. The autumn sun over the trees turned the curving branches laden with amber blossoms tipped with white into a fountain of gold. Last year in all the drought, when other Dahlias had not one flower, every Pierrot was covered with blooms. Flaming F. W. Fellowes (so gay with Dogwood berries); fluffy George Walters; shaggy dark red Grizzly; serene old salmon H. Fiat; ruddy Patrick O'Mara; exquisite lavender Attraction; wine-

red American Beauty; graceful bronze Insulinde; how could I miss one of these tried friends, grateful for the least care? Three more. I never liked Mariposa till last year, and then I saw it in a show with the evening light streaming through a window behind it, and just a touch of lavender against its pink. I capitulated. Also flawless I. de Ver Warner, and great golden El Dorado, and the dozen in complete. But how many beauties I have omitted! I shall have to enlarge my island.

If you go to a Dahlia exhibition to pick out what you would like for your garden next year, do you look for crisp beauties, or huge floppy tired balloons? At our Bergen County (N. J.) Dahlia Show last year the flowers were as crisp and lovely the second day as the first. Amun Ra was the best flower in the show. Very likely our flowers did not compare with those in a professional show for size, but the man who saw a Dahlia display grace, good color, beauty and strength of stem in half a dozen amateur collections did not need to be afraid to grow it in his own garden. Also he would not be vexed because of the size of his own specimens.—C. A. GARDIN, *Ridgewood, N. J.*

Fringed Gentians from Seed

TO THE EDITORS:

I have been so delighted with the success in raising Fringed Gentian out-of-doors by seed sown in late fall, that I would like to tell others of my experience.

In November, 1921, I had some seed given me by one who knew I would really strive to accomplish something with it. So, according to instructions, I chose spots in rich meadows sloping down to bogland, scraped away the grass and weeds with a sharp spade and pressed the fine seed into the soil. This I did in Bergen Co., N. J. Also in Dutchess Co., N. Y. Many times through the summer and fall of 1922 I watched those spots for signs of Gentian plants and found no encouragement to my hopes—no sign of a Gentian. In the fall of 1923 in the midst of planting operations on the same place in Dutchess Co., I passed through that "Meadow of the Wandering Brook" as we call it, and was startled and joyful to suddenly see a glorious spot of blue—Fringed Gentians! where they had never been before, on one of our scraped spots planted November, 1921! I called loudly to the man on the hill, my fellow worker in all I have done up there. Then we made a great search for other spots that we had planted but found only this one of Gentians, and decided that the others had been too wet.

After that I was very keen to go to the meadow in Bergen Co., N. J. Sure enough, a lovely stretch of Fringed Gentians where I had sown them. The interesting part of my experience to me is that I have two proofs of seed lying in the ground two winters before germinating. Perhaps it explains the very elusive nature of Fringed Gentians, here one year, gone the next.—EDITH RIPLEY KENNADAY, *Mendham, N. J.*

—The Fringed Gentian germinates the first year but makes only a low rosette of leaves close to the ground and is quite inconspicuous. The full story of its successful cultivation from seed and its life history will be found in G. M. for December 1905, page 210, when Mr. Thos. Murray of Tuxedo Park, N. Y., worked out the details and was presented with the G. M. Achievement Medal in gold.—EDITOR.)

Poultry House to Match Suburban Bungalow

TO THE EDITORS:

In planning a suburban home on a tract of nearly two acres I desired a small poultry establishment together with garden and small orchard. The house was to be a bungalow with spacious yards and as much as I was interested in well-bred poultry I was unwilling to permit the "hen house" to detract from the appearance of the property. The solution of this problem was really very easy, as will be seen from the illustration of the poultry plant.

By constructing the house with a substantial cornice, I gave it an appearance which harmonized with the bungalow. The floral effect under the windows was obtained simply by Four-o'clocks. Bungalow windows also were used in the poultry house which together with the gates and yard lumber were painted chestnut brown and ivory to match the bungalow and garage. The poultry yards were laid out in back of the poultry house and were made attractive by vines.

The poultry house measures 12 x 18 ft. ground dimensions, and is built on a small foundation of concrete blocks. It is 8 feet high in front and 6 feet in the rear. The floor is concrete and is provided with a drain as well as being tiled underneath, keeping it dry and sanitary. There is also running water inside the house. The interior is divided into three pens each provided with roosts, nests, feeding equipment and other necessary accessories. Small doors in the back of the house communicate with the yards. The roof covering is slate-surfaced composition roofing, red in color. This substantial and attractive poultry house accommodated about sixty mature fowls of the White Plymouth Rock breed. I built it in 1914 at a cost slightly less than $100.—D. S. BURCH, *Washington, D. C.*

What a Ladybug Will Do for You

TO THE EDITORS:

When the Chinese Hibiscus was brought into the house this fall, I told Mr. W. that he had better put it in the cellar, it had grown so large, I could not keep it free of aphis during the winter. But the time slipped by, and still the Hibiscus occupied its usual place in the dining room. But I found a helper. While picking some late Pansies the first of November, I brought in a Ladybug and put her on the Hibiscus. And did she get busy? Although there were just a few aphis on the tender tips, she went from one branch to another, staying three or four days on each, cleaning each one before moving to the next. I was more than interested and friends dropping in would go look up her ladyship.

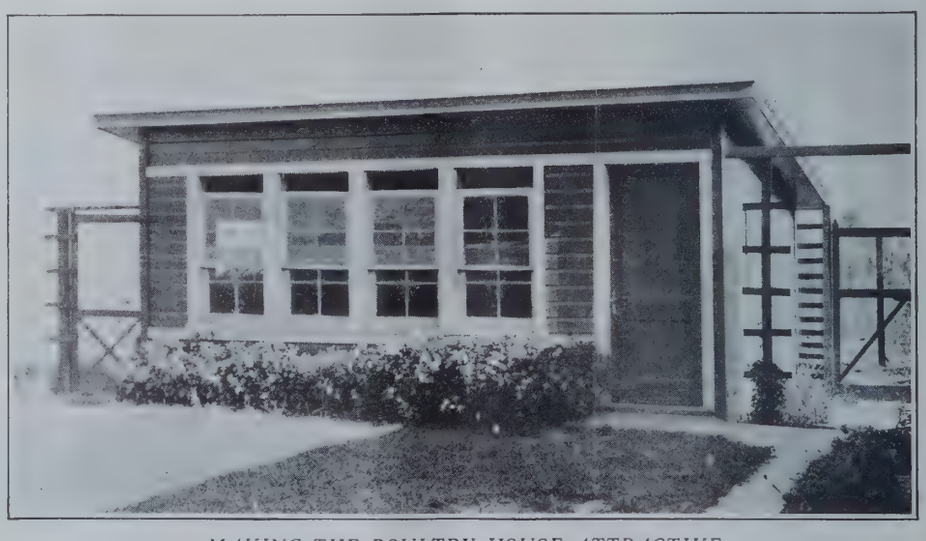
Then she was missing, after seven weeks of good service. Whether her span of life ended, or she went into the soil to sleep, I know not. I never would have thought a mere bug would become so interesting. I wish I had several of them to help out on the plants.—G. W., *North Anson, Maine.*

Some Obstreperous Perennials and a Plea for Smaller Flowers

TO THE EDITORS:

Pardon me if I do not believe in unstinted praise for some flowers I see praised in catalogs.

With me Physostegia virginica, or False Dragonhead, proved a nuisance for its roots ran so far underground as to threaten the existence of every other plant in its vicinity. Then, too, it would send up huge flower-spikes promising good flowers, but these never came to fruition and looked as if nipped in the



MAKING THE POULTRY HOUSE ATTRACTIVE

Designed to match the bungalow home of the owner, this 12 x 18 ft. structure was more substantially built and equipped than the usual "hen-house" and accommodates about 60 fowls (see text above)

GARDEN OF MRS. GEORGE O. FORBES AT ORCHARD FARM, NORTH EGREMONT, MASS.

With its Ferns and arching Apple trees and low stone wall this bit of "wild garden" (left) offers a sheltered, refreshing retreat for late summer afternoons. A stepping-stone path (below) runs between wide bands of Phlox and airy Gypsophila up to the seat beneath the Apple trees. Mrs. Forbes writes us that she was "her own landscape gardener"—certainly her handiwork conveys the pleasantest sense of having been fashioned in friendliness and affection

bud, although no insect was to be seen. I dug it up, as I thought, to let it fight for its existence with the grass in the wood back of my house, but still it kept bobbing up around other plants' roots. I had a long fight to eradicate it from my hardy border.

I am particularly fond of blue flowers. (By the way, I wish florists would refrain from calling lavender flowers "azure," or "sky blue." The sky is not lavender). But Anchusa italica Dropmore was a disappointment to me if not to the bees in my garden—it fairly squirmed with them. The plants were so straggly and the small flowers turned mauve so quickly that they went to the wood too, for I do hate not to give a flower a chance for its life somewhere.

And now a third offender. With this house I inherited, to my sorrow, a very lively perennial called Widow's Tears. It has triangular blue flowers and blooms very early in the season but I cannot transplant or give it away fast enough. It would be rather pretty if it were not greedy for more ground, as the blue is a very clear, true shade.

Last year I tried Viola cornuta and found to my agreeable surprise that Violas are the Ladies' Delights of my childhood's garden. I think we are making a great mistake to-day if we do not invite the children into our gardens and let them have a plot to cherish.

Such beautiful blues as Forget-me-nots are very easy to raise as biennials but my wonderful perennial Larkspurs, light, medium, and dark blue, get only so large and then one lovely spike will droop right at the root. I can find no worms. I have applied coal ashes and wood ashes in vain. I have dug up affected plants, dusted with flowers of sulphur, and sprayed with bordeaux. At times I find misshapen flowers and a brown gum underneath their leaves. Read me this riddle some kind soul! [We believe lime in the soil will cure.–ED.]

I find the Primula veris or Polyanthus a wonderfully constant garden friend with its gay little nosegays of mahogany and gold, yellow or white blossoms surrounded by lush green leaves. It is such a relief in its quaint old English atmosphere from the present "jazz" craze for big, bigger, biggest flowers. Why try to coarsen to the level of vegetables, flowers that should display ethereal beauty and grace of form? A big, big cabbage is appropriate in the kitchen. So say we all of us! But I remember when big Chrysanthemums were the rage and the more stiff and unnaturally huge the poor flowers the more acceptable in the public's eyes. Where are the pomps of yesterday? Have a care, good friends. The Lady Dahlia, too, may fall from her high estate, if by gross feeding we change her into a blowsy kitchen wench.—C. A. GARDIN, *Ridgewood, N. J.*

Raising Boston Ferns for Myself

TO THE EDITORS:

Quite recently I have learned a trick about raising the most popular house plant in common use to-day that is well worth repeating. I refer to the Fern commonly known as the Boston Fern. For many years I had six of them in my windows which drew forth unstinted praise from visitors to my home, and I was credited with a degree of skill in handling these plants that in all truth I am ashamed to say I did not deserve. They were glorious without doubt (in ten-inch pots) with great fronds almost touching the floor. For each plant I reluctantly separated myself from a five dollar bill which I gave to the gardener at

the greenhouse, yearly. Six times five is thirty and when I realize the many things that I could buy for that sum of money I hesitated for economic reasons.

One spring day in going past one of those attractive "Five Cent Stores" I saw in the window a lot of tiny Ferns of the Boston variety labeled at the irresistible price of five cents. It may have been a hunch, or an inspiration, or some other lucky impulse, but I bought fifty of the plants and took them home. Then followed bewilderment and uncertainty as to their disposition. To make a long story short, I filled my window-boxes with the small Ferns with Vincas for trailers. Under careful attention as to watering and fertilizing, the little plants grew to great sizes by fall.

Toward the middle of September I transplanted the Ferns from the box to large pots and put them in shaded places to establish themselves. Without any qualification I can say that the plants that I bought for the small sum of five cents had developed while in the boxes into large, rugged specimens, eight of which completely filled a ten-inch pot and looked fully as well, I might say they looked better than those that I bought at the greenhouse for five dollars. Since this first effort I have increased the number of plants that I grow each year to ten, which I dispose of without trouble for four dollars apiece to satisfied friends. I think that if I were thrown on my own resources I would without hesitation turn to the raising of these plants with an assurance of making a good living.—MRS. EDWARD GOOD, *Dorchester, Mass.*

What Your Garden Can Give in the Way of Christmas Greens

TO THE EDITORS:

We have been much interested in the article in the December GARDEN MAGAZINE regarding Christmas decorations, and I am writting to ask if you will please give a list of the Christmas greens which we may use without fearing to harm our woods? When we are told not to have Holly wreaths and not to use Ground-pine, it leaves few things in the minds of the ordinary buyer of greens. Of course, if one might follow the good advice given and grow our own, this would indeed be best, but many of us are not so fortunate as to be able to do this. Your magazine is most helpful.—K. K. K. K., *New Jersey.*

—There are lots of artificial and natural decorations that may be used as substitutes for Laurel and Holly. Some of the prettiest that I have seen have been Ruscus, and Everlasting wreaths, the latter trimmed with artificial Poinsettias and toned down with artificial Holly leaves. I have also seen red wreaths of Immortelles with electric bulbs and some with red and green bulbs.

Along Broadway during holiday season some of the largest and most shapely wreaths were of Box, with clusters of red Immortelles which were much more showy and effective than Holly. Also I am suggesting that the garden club members grow the Australian Straw-flower (Helichrysum bracteatum) in the light shades and dye them scarlet, or in the dark red shades and make wreaths of these and the California Privet (Ligustrum ovalifolium) whose leaves usually stay on until Christmas. There were also very pretty wreaths of Sea-lavender (Statice) and red Roses (artificial) and on the whole I think that the variety and beauty of many of the artificial decorations in New York City last year (particularly in the business houses) exceeded most of the natural ones. Pine and Hemlock can be used as substitutes for Laurel, and we hope the time will come when Laurel will be grown for this purpose only.—ELIZABETH G. BRITTON, *Secy.-Treas. of the Wild Flower Preservation Society; Honorary Curator, New York Botanical Garden.*

Does Night Light Hasten Bloom?

TO THE EDITORS:

The enclosed quotation from Miss Yssabella G. Waters of Groton, Mass., seems to me to be of general interest. Miss Waters has evidently worked out her conclusions quite independently of recent experiments along those lines. She also suggests that such methods might be applicable to starting Stocks, Snapdragon, and other seedlings which are usually sent to a greenhouse early in the season. Miss Waters writes:

> My house plants have been doing beautifully, especially Lily-of-the-valley. I bought two dozen pips and when they were being potted Jerry said he did not see why I should send away for such things as I have a very large bed of my own, so he went out and dug up a number. They are coming on finely but more slowly than the New York ones, as the latter were all ready to spring up.
>
> You will remember the upper hall window which opens nearly to the floor? Jerry made me two wide boxes and everything that is placed there grows like a weed. I have a large dish of Paper-white Narcissus up there. One blossomed in twelve days. Some Magnolia buds I cut on Sunday were in full bloom by Friday. I shall have Lilac and Forsythia soon. I think this helps—I keep a light there all night as I have been told that light is quite as necessary as sun—that in Norway and Sweden where there are two months of practically continuous daylight, growing things mature much more rapidly than in this country where there are long nights. Is this true?

—ELIZABETH S. STRANG, *Leominster, Mass.*

Growing Scillas From Seed

TO THE EDITORS:

It was delightful to note after Quarantine 37 went into effect that our clumps of Scillas were increasing, but I am ashamed to say that I weeded out the crop of seedlings for one year before discovering the natural seeding habit of this charming little plant.

Our Scillas are planted in groups in a tiny garden devoted chiefly to wild flowers such as Hepaticas, Violets, the Thalictrums, Ferns, and a bit of Vinca minor. With this planting the earth is undisturbed except for removing weeds. In the fall we cover the bed with entirely decayed manure, which makes a light mulch about the plants as they appear in spring. After the Scillas bloom the heavy seed-pods bend on their slender stems and gradually bury themselves in the soft earth. Here they remain until the following spring, the little seedlings appearing in May, before the season's blooms have entirely faded. The very slender cotyledon bears the flat seed at its tip for some time. It was these odd seedlings that I removed for weeds before it occurred to me to associate them with Scillas. Perhaps a hundred young plants have established themselves in the last three years, and this spring several bloomed, thus determining their identity beyond doubt.

It has been a pleasure to follow this little plant through its life history, and a very real satisfaction to increase our supply of bulbs. Perhaps G. G. Melhart, Bernard H. Lane, and others who have written in this column of their experiences with Scillas will be interested to watch their behavior in the matter of seeding this coming spring. With my own observations in mind, I was very glad to note the Editors' comment on this subject in the June number.—HARRIET L. KUTCHIN, *Green Lake, Wisconsin.*

Of Irises and Crocuses and Garden Noises

TO THE EDITORS:

I have heard it said, "If you want to find out anything or need help, write to the Contributors' Column of THE GARDEN MAGAZINE AND HOME BUILDER," so here goes!

Has any one heard of a Bearded Iris becoming "naturalized" and growing wild in these United States? I found a reference to I. germanica having been seen growing wild in the vicinity of Cape Cod. But where? People are so vague on these subjects. Vicinities are rather spread about! Then again I remember some rumor of I. florentina having been found way down in Louisiana somewhere and reports having been sent into some botanical garden. But which botanical garden? This time of year (April) one becomes particular and vagueness is unpopular.

I wonder how many people have really pruned their Grape-vines and fruit trees? We do our Grapes before Christmas. In spite of the open winter the suburban gardener is a bit like a wild animal the way he retires to his lair at the first hint of weather. He ventures out to shovel snow only because he must, and he often lets his trees and hedges be broken down instead of knocking the snow off them. Suppose a cold swab of it does go down the back of his neck during the process, it is all in a good cause! There are lots of nice things about a garden in winter and not the least attractive in ours this last season has been the sweet, tinkling sound made by the Iris' labels. I know they should be fixed and not swing because wires will wear out and that the stiff upright wire stakes look like an "Indian graveyard" when the leaves that hid them are gone, but that chorus is very pleasant on a clear, cold, and star-lit night—it seems a gentle reminder of the year gone by.

We don't pay enough attention to our garden noises, anyhow. With us the first sound of approaching spring is the snap of the opening Wisteria seed-pods. How they do fly open! And how nice the shiny, flat, brown seeds are to play "shop" with. They make such good "money!" Then there is the

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Bulbs are practically all grown in Holland, and as we are among the largest of American importers, we get the pick and import only "firsts." We have been importers for three-quarters of a century and know intimately the best growers of the different varieties. Some excel in growing one kind and others in another, so that we are in a position to get the best qualities of All Varieties. Our Annual Bulb Catalogue is now ready. It is unusually attractive and complete and should be in the hands of every lover of Bulbs.

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robin's supper song; the cheerful song sparrow's early, early good morning; and sometimes our meadow lark sits on the very top of an old Spruce tree and shouts "Little boy, you can't see me," while all the time the sun lights him up with gold and he looks so big and yellow way up there! Then when the weather gets fearfully hot, you always notice the sound of a lawn mower.

But I meant to say something about the Crocuses that bloomed for us last spring. The earliest we had was Sir Walter Scott, light mauve striped with darker purple and of large size. It is planted in a sheltered position below the drawing room window at the feet of some low-growing Junipers and a Mugho Pine. It blooms with the first Snowdrops. The next to come was C. chrysanthus. You know they vary greatly? Ours are a pale yellow variety and are behind the house on the north side and so are slightly delayed in their blooming. I have C. Balsanae, too. It is a darker yellow and has a dark brownish purple stripe outside and opens out very flat when the sun shines. Then come the white ones in the grass—King of the Whites, very large and lily-like, in drifts quite like snow. One of our friends objects—says they remind him too much of winter. He has no early flowers in his garden, though. They *are* a little cold, especially as masses of Snowdrops grown on the edge of the shrubbery near by. My favorite spring Crocus is Lord Duncan, a delightful "pale orchid" mauve, a rather short-stemmed, medium-sized flower and very sweet. How the bees do buzz around! This Crocus does excellently in grass and comes before the large purple one (C. purpurea grandiflora). With the exception of King of the Whites and Margot, which is a delicate large flower, the medium-sized Crocus is by far the loveliest. It is true of all plants that where there is a coarseness of texture, color, or size, the fullness of beauty is lacking.—ETHEL ANSON S. PECKHAM, *Davenport Neck, New Rochelle, N. Y.*

Primroses That Brave March Winds and Chrysanthemums Which Defy November Frost

TO THE EDITORS:

I notice that Mr. Gapen in Reidsville, North Carolina, had Kitty Riches Chrysanthemum in bloom the latter half of August, and I can commend this as a very early bloomer in the garden here, about twenty miles north of New York. The parent plant died over winter, but a slip seems to have survived. I had about twenty really hardy kinds of Chrysanthemum, but when I attempted to add to the number I found that a great many of the so-called hardy ones winter-kill. I envy the climate of North Carolina when it comes to Chrysanthemums! My people came from South Carolina, by the way.

Yellow Advance I found a most beautiful and hardy large creamy yellow. Glory of Sevenoaks did very good work this year, but some years it shows misshapen golden yellow buds as early as June. I used to see some wonderful plants of Pacific Supreme growing in Brooklyn, N. Y., and now after three attempts, I had some of the big pink beauties myself outdoors, although this is not classed as a hardy variety. As late as November ninth I still had out-of-doors the "Japanese" red and gold of L'Argentuillais; also double blooms in canary yellow, maroon, white, pale pink, red with white, orange, bronze, and variegated Pompons; and reddish terra cotta semi-doubles which came to me as Indian Chief and blend wonderfully with autumn leaves. Some years these plucky flowers last on to gladden our Thanksgiving table.

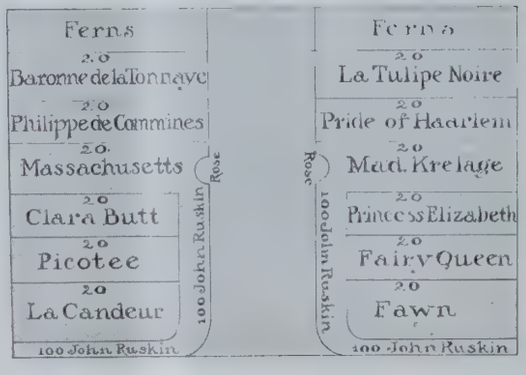
A few single Wallflowers with their beautiful oranges and browns opened in early November too and I was glad to find them fragrant like the double variety so popular in England.

I wonder why more flower lovers do not raise hardy Primroses, another English favorite. I combined them with Trumpet Narcissus, Violets, and mahogany-colored Pansies in one oval in my hardy border and they are the most daring of all my spring beauties in braving March winds with their white, yellow-crimson or mahogany panicles often edged or laced with gold. The Polyanthus is most easily raised, but the seed takes often a couple of weeks to germinate, and then the tiny plants need plenty of water, although for me they grow in even the sunniest corner. Once you have them, they come every year to spread sunshine while winter is still grudging to depart. They are too generous to blossom only once so keep on into June sometimes, with their dainty little nosegays, just right for a buttonhole. In England every man or woman asserts "his (and her) inalienable right" every day to a buttonhole bouquet, and I do not see why we should not enjoy them too. I have a little fixture which I slip under my lapel, after filling it with water, and I can often bring home a good firm Rosebud, or Primroses, or pale blue Belladonna Larkspur as lovely as when picked.

Can some one tell me how to winter a blue Hydrangea outdoors? I have had one four years now, and heaped earth on it every year, but see no blossoms, although one of the chief streets in Patterson, a few miles away, is blue with them every year.—C. A. GARDIN, *Ridgewood, N. J.*

TULIP GARDEN AT THE HOME OF MR. JAMES GEHRIG AT HEMPSTEAD, N. Y.

Gaining a brilliant color effect by planting carefully selected varieties in shades of rose chiefly, with off-setting touches of lilac, pale fawn, mahogany, etc.; groups of twenty bulbs each and a bordering band of the salmon-rose John Ruskin (100 bulbs on each side of walk, see accompanying plan by Adolph Kruhm)



L'ENCORE

Fragrance of pine, and a wood-thrush singing,
Old-fashioned roses and jasmine in bloom,
Oh, for the woodland with songs of birds ringing,
Oh, for the roadside sweet-scented in June.
E. W. K.

To the GARDEN MAGAZINE & HOME BUILDER, *with gratitude for its delightful suggestions for garden and roadside.*—MEADOW SPRINGS FARM, *Indiana, Pa.*

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In these days of bewildering Peony appeal, you may well exclaim, "How can I decide where to place my order!"

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SAMUEL GARNER

* * *

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LILIUM WILLMOTTIAE

OUTSTANDING PEONIES OF THE SEASON

A. M. BRAND

A Peony Connoisseur's Impressions of the American Peony Society's Twenty-first Annual Show at Des Moines, Iowa

IT WAS truly a great success; indeed, one of the most successful shows ever held by the Society from the standpoints of attendance, local interest, and enthusiasm displayed. Over 15,000 people viewed the flowers during the course of the three days' exhibit, and over 12,000 paid admissions to view the 30,000 blooms on display.

Notwithstanding the cold, backward season and the late frost that had almost entirely wiped out the Peonies in the Missouri Valley, and the fact that the dates of the show as at first set had to be changed to a week later (June 21, 22, 23) the flowers as staged were of good size and color and (because of the extensive educational campaign that had been carried on by those in charge of the exhibit as to the best methods of handling Peonies for a show) were in uniformly splendid condition. Cold storage facilities were taken advantage of by amateur and professional alike, and the result was an evenly conditioned lot of splendid flowers such as have never been seen at a Peony show of this size before. The unfavorable weather conditions of the season did handicap the show in one respect, however. None of the large growers from Minnesota, Wisconsin, or northern Illinois were able to put on the large exhibits that had been expected of them.

IN THE open or professional classes, Harry F. Little of Goodland, Indiana, won first in Class 1, and was awarded the Society's Gold Medal for his magnificent exhibit of uniformly well conditioned blooms including a wonderful bloom of ENCHANTRESSE, one of our best late whites, so hard to beat when it comes good, which it generally does in the far north; an exceedingly pretty specimen of SARAH K. THURLOW a pure, delicate blush pink, a flat rose type flower, very beautiful; and a splendid bloom of JUDGE BERRY, so seldom seen in good form in the show room because of its extreme earliness. Here also was a great LA FEE, infrequently shown of late—a flower that has never appealed to me much in the field, rather too loose and sprawling there, but a fine flower for indoor display. A good bloom of KELWAY'S QUEEN, of the true variety, a most distinct flower. There is never any question as to its identity when the real Kelway's Queen is shown with its broad petals of splendid substance, its good form, and pleasing color. Other good specimens in Mr. Little's exhibit were of E. B. BROWNING, TOURANGELLE, LA FRANCE, MARTHA BULLOCH, MILTON HILL—a magnificent specimen which was awarded sweepstakes as the best bloom of the show. A wonderful line of the very best reds, KARL ROSENFIELD, RICHARD CARVEL, LORA DEXHEIMER, CHARLES MCKELLIP, BRAND'S MAGNIFICENT, DAVID HARUM, and LONGFELLOW. Longfellow undoubtedly has the best of it as to color, but there is a brightness about Lora Dexheimer that leaves little to be desired. Mr. Little's specimens of Brand's Magnificent and David Harum were also two truly fine blooms. There was also a superb bloom of that odd Peony, HELEN WOLAVER, in looks more like a Rose than a Peony.

The second award went to Mr. Bonnewitz, of Van Wert, Ohio, who also showed a splendid exhibit in Class 1, though his flowers as a whole hardly measured up in size and finish to those of Mr. Little. KELWAY'S GLORIOUS, JAMES KELWAY, OPAL, and TOURANGELLE were exceptionally good, however. A great bloom of JUBILEE set off the entire table. Jubilee is without any question one of our greatest show flowers, its only defect being a weak stem which counts against it in the field. SOUVENIR DE LOUIS BIGOT was also shown in fine form. Here is another of our coming flowers, one of the most pleasing Peonies grown. A much better performer in the field, it carries to a great extent those very pleasing shades of salmon pink so peculiar to Walter Faxon. A very good bloom of PASTEUR, a chaste flower of clean white with just a trace of pink and a touch of green, a sort we do not see often enough in our gardens. A splendid bloom of RAOUL DESSERT and one also of LAMARTINE (Lemoine).

People who see Lamartine in the field and who do not know of the wonderful possibilities of the bloom, do not realize what a change is wrought in this flower when developed inside. A small bloom of PRESIDENT WILSON showing splendid color. A very fine THOMAS C. THURLOW, a good WALTER FAXON and a splendid bloom of SOLANGE, in fact, the best Solange in the show. We can rave about a dozen different flowers, but when it comes to a truly good specimen of Solange, without hesitation we pronounce it the greatest flower of all.

IN THE Brand's Peony Farms, Fairibault, Minn., exhibit were to be seen very nice blooms of LA LORRAINE, one of Lemoine's choicest flowers. A good bloom of REINE HORTENSE, an old-time sort but one of the best and a favorite of mine, a nice PIERRE DUCHARTRE, a most desirable variety, why so little appreciated I cannot understand. It is always a good flower in the field, a beautiful pink, and yet we hear so little of it. LA FRANCE, HENRY AVERY, and PHOEBE CARY, showed to special advantage and a great bloom of MARTHA BULLOCH overshadowed everything else in this display. There was an exceptionally good SARAH BERNHARDT, which seems to come better the farther north it is planted, the blooms are larger, the color deeper and the contrasts more pleasing—a flower of magnificent form.

IN THE color classes some fine vases of twenty blooms each were shown.

In whites: LE CYGNE took first on a good showing by Mr. Bonnewitz. Le Cygne has not been up to its usual high standard in the shows this season, either at Des Moines or elsewhere. As a rule, it is a distinctly outstanding flower but evidently this has been its "off year." A good vase of MADAM DE VERNEVILLE won second. It always seems a mistake that such a good flower received so low a rating in the American Peony Society's symposium. It is a good white, fit to be seen in almost any company, and surely deserves a much higher rating.

In the dark pinks: first deservedly went to a great vase of uniformly good MONSIEUR JULES ELIE of great size, shown by Mr. W. G. Dumont, while second was taken by the new seedling, FLORENCE MCBETH, by Mr. Sass. This flower will bear watching. An intense pink of the large flat rose type, deep pink at the center, fading to a lighter pink about the edges. As shown here, and in another exhibit as a single specimen, it impressed me as a very desirable sort. A vase of MIGNON, a variety of which good specimens are seldom seen, was shown by Mr. Little and was undoubtedly the finest vase of this rare sort ever exhibited in America.

In reds: first went to a great vase of LONGFELLOW and second to a vase of FELIX CROUSSE. Both vases were done to perfection, but the brighter, richer red of Longfellow won. A very fine vase of wondrous blooms of that old variety, ADOLPHE ROSSEAU was disqualified because it contained more than the required twenty blooms. Although not possessing the real quality of the newer and better reds, it is an imposing flower, and when shown in the superb condition of these vases is truly to be admired.

The display of Japanese varieties was the best seen at the National Show in years, and Mr. W. W. Cook received first. Some good FUYAJO were in evidence also a good vase of RASHOOMON, a splendid vase of TORA-NO-MAKI, and some marvelous specimens of SOMEGANAKO. Second went to Mr. Bonnewitz with a very nice vase each of ISANI GIDUI, FUYAJO, FLASHLIGHT, MIKADO, TORPILLEUR and an unusually fine group of AMA NO SODE. The more beautiful of the Japanese Peonies are well worth while and it surely will not be long (now that we can see the really good ones) before our taste will become more discriminating. Mr. Wilkus also had a striking variety in his collection, a single large vase of DEPARTING SUN, very pleasing, with great, broad, deep bright red guards with a very prominent yellow center. In singles, ALBIFLORA showed up very well as also did several vases of PRIDE OF LANGPORT. Pride of Langport is an immense flower of a very pleasing light pink that lasts long and stands up well in the sun.

SOME of the greatest surprises of the show were met with in the amateur classes. Never before has a National Show had so large an amateur exhibit, nor has there been such uniformly high quality. The Peony is a hard flower to show well until one has had experience and those who had the exhibition in charge deserve great credit in the educational campaign they carried on along these lines. The amateur classes stood right up with the professional exhibits. The big amateur class called for a display of fifty vases of single blooms and there were four conspicuous entries, with honors going in this order: Mr. W. W. Cook, Miss Chamberlain, and Mr. Edward Auten, Jr.

Mr. Cook had a wonderful LAMARTINE which showed up unusually well under the artificial light of the room, and a most beautiful specimen of MILTON HILL. I do not know that I ever saw a better bloom! Mr. Cook also had a superb vase of Milton Hill in another class, two blooms of which were exceedingly fine. A good MLLE. LEONIE CALOT, an old variety, blooms a trifle small but such coloring! Could one get a little more size on Mlle. Leonie Calot it would be one of the greatest of all Peonies. A good specimen of ROSA BONHEUR, beautiful in the bud, a fine JUDGE BERRY as well as a very nice PHOEBE CARY. Also a splendid PHILIPPE RIVOIRE, a rather small flower but of beautiful form and such a pleasing red, truly distinct.

Miss Chamberlain's exhibit was a very close second and showed wonderful LADY DUFF, RAOUL DESSERT, PHYLLIS KELWAY (a most charming flower), LONGFELLOW, MARTHA BULLOCH and other good ones.

A fine specimen of SOUV. DE MAXIME CORNU, a cross between P. lutea and P. moutan, a bronzy pink Tree-peony, was shown by Mr. Farr, and attracted much attention.

At every great Peony show certain varieties stand out from all the others, but curiously these vary from year to year. MILTON HILL, MARTHA BULLOCH, LA FRANCE and LADY ALEXANDRA DUFF were the great outstanding flowers of 1924 at the Des Moines show.

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We have purchased the entire stock of *Peonies* from that lifelong enthusiast and specialist, Mr. E. A. Reeves, Chagrin Falls, Ohio.

This stock of 100,000 plants includes the Gold Medal Collection with which he took many prizes

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We have set aside one hundred of that gorgeous new Peony, to sell at the very reasonable price of five dollars each for strong three to five eye divisions. We shall plant all but the one hundred, so get your order in early. The enormous blooms are colored a rich satiny pink. The Peony Society tells the story of this wonderful flower when it gives it a rating of 9.8.

We would be glad to mail you our special fall catalogue describing plants best handled at this season, especially Iris, Phlox, Dutch Bulbs, Peonies, and Evergreens.

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GARDENING FOR THE BEGINNER

THE MONTH'S REMINDER—SEPTEMBER

As to Time and Place: In gardening practice a date can only be approximated as seasons vary and local conditions will have some influence. Generally the latitude of forty degrees at sea level and a normal season is taken as standard. Roughly, the season advances or recedes fifteen miles a day, thus Albany would be about ten days later than New York (which is latitude 40). The latitude of Philadelphia is a week earlier. Also allow four days for each degree of latitude, for each five degrees of longitude, and for each four hundred feet of altitude. Latitude forty passes through Philadelphia, Pa.; Columbus, Ohio; Richmond, Indiana, Quincy, Ill.; Denver, Col.

How to Use This Guide: Suggestions as to the most important things of the month are given in this department so as to "remind" the gardener of the current duties. For routine details of such things reference should be made to standard handbooks and guides. It is impossible to make a complete manual of practice in each number of a periodical magazine. Yet timely articles will be found elsewhere in each issue, and references to back numbers will often solve the immediate question. Moreover, the editorial staff stands ready to help any reader with personal advice by mail. A self-addressed stamped envelope should be enclosed with the question.

Who Writes This: The advice and instruction in this department are the gleanings of many years experience in practical gardening matters by competent amateurs and others who have "been through the mill." The contributions are made from various sections of the country: for example, Mr. Jesse A. Currey contributes from Oregon; Mr. Theiss from Pennsylvania; Mr. Henry Gibson from Pennsylvania (formerly from New York); Mr. Sherman Duffy from Illinois; Mr. A. Kruhm from an extensive Eastern acquaintance; and, in addition, occasional notes from elsewhere and by the editorial staff and associated contributors of experience.

EARLY transplanting of Evergreens is desirable. Autumn is a good time, but unless the work is done early, it is often worse than useless. Every spring and summer sees thousands of browning and dying evergreens in gardens—the result of too late transplanting. Evergreens differ from deciduous trees in that they are never dormant. Water movement goes on continually through the roots, which must not be exposed to wind for a single moment. Every effort must be made, after transplanting, to get the roots to take hold of the soil, so they can draw moisture from it—pack the roots well, and be sure to water freely after setting. It is especially necessary to mulch evergreens after fall setting. An unusually generous hole, with the earth loosened and fined deeply is a great help, too; for such recently loosened earth does not freeze as readily as unloosened, hard-packed ground. Evergreen planting before the fall rains set in is the best sort of plant insurance.

PROLONGING THE VEGETABLE SUPPLY

LETTUCE sown now in the coldframe will be useful not only in the late autumn, but also next spring. Loose-leaf Lettuce is perhaps preferable for this purpose. Sow as you would in the open. Use as soon as the leaves are large enough. When cold days come, put the sash on the frame. This will keep the plants growing. Lettuce for the table can often be had in this way as late as Christmas. When real cold weather arrives, cover your frame securely. A layer of straw or leaves or other heat-retaining material, topped by strips of old matting. old carpet, burlap, or any other convenient material, will protect the plants during the winter. They will start growth with the first appearance of spring suns, when the covers should be rolled off during the day. In this way it is possible to have fresh Lettuce before one is able to sow anything out-of-doors.

September is a good month to start a bed of Winter Onions. It is odd that relatively so few onion lovers grow these hardy kinds. The Egyptian Tree Onion is so hardy it cannot be killed. Once started, the bed will practically care for itself. Set your little bulbs in a trench and as the tops shoot up, fill in with earth, as you do with Celery. This will blanch the scallions and they will be ready to eat as soon as it is possible to get them out of the ground in spring. These hardy Onions are more pungent than the ordinary Onion, and blanching them thus reduces this pungency. The Onions that are left in the ground will grow, year after year, increasing by multiplying at the root, until each becomes a great clump of stalks. The little sets are borne on top of the stalks, instead of seed balls.

When you store your fall Potatoes, sprinkle some powdered lime among them. A very little goes a long way. The lime will help to prevent rot from starting or spreading among the tubers. If a small pail of it is kept at hand, a little can be added from time to time, as the Potatoes are handled during the winter.

IN THE FLOWER GARDEN

THIS is the month to sow perennials and biennials. If the seeds are put out now, there will still be two good growing months and perhaps an even longer period. The seed-bed should be shaded, at least in the heat of the day, until the plants are well up.

Many persons have difficulty in raising hardy Larkspur plants. This may be due to the fact that the seed takes so long to germinate. This germination period may reach a full month. Unless the bed is kept moist during this time, germination may be checked. It is necessary, therefore, to keep the bed covered if it is in the open, to prevent it from drying out. A piece of burlap laid over it makes a good cover and will keep the moisture in the soil.

Plant Madonna Lilies (Lilium candidum) now. It is amazing how this hardy plant will multiply if given good conditions, and especially if dug up frequently and the bulblets removed. Some years ago a friend planted one bulb of this sort, and has given the resulting growths good care. To-day he has great masses of these lovely Lilies, and in half of the gardens of his town are Lilies that have come from bulbs he has given away.

WHAT TO DO WITH YOUR IRIS

IRIS roots must be lifted and reset frequently, the frequency of resetting depending upon the variety. German Iris seems to do poorly unless lifted at least once in three years. A good criterion is the amount of bloom. When blossoming falls off, it is a sure indication that the roots need dividing. Curiously enough, Iris roots need to be on, rather than in the ground. They should not be buried deep, therefore, but be hardly more than covered with soil. After a little while they lift themselves up so they are half out of the earth.

German Iris does best in dry locations; the Japanese prefers damp locations. It spreads more slowly than the German. Siberian Iris seems to prosper in damp ground, and spreads rapidly. It is extremely decorative, with its narrow, grass-like leaves, delicate blooms, and red bud sheaths. German, Siberian, and Japanese (in this order) make an extended season of bloom.

Siberian, Japanese, and some other forms of Iris grow from seeds. These are borne in tough pods. They are hard-shelled and require long periods to germinate. The best way to grow plants from seeds is to gather the seeds as soon as they are mature, and sow them in a flat or other container which can be set aside. Many of the seeds will not germinate for a year after the sowing. But it the earth is undisturbed, and if it is kept moist and shaded, excellent plants can be raised.

A WATERING TRICK

IF you are faced with the problem of how to water some dry place in your garden you can probably solve it as I have done. There is always some place about the garden which cannot get moisture. It may be on account of over-hanging eaves to the dwelling as it was in my case. I could not turn the sprinkler on close up to the house and as a result the shrubbery there suffered during the dry spell, for it is not always convenient to stand for an hour or so sprinkling it by hand. To overcome this difficulty I secured several five gallon-gasoline or

(Continued on page 62)

Do This Month

1. Build new coldframes and hotbeds; overhaul and repair old ones
2. Prepare beds and borders for late fall planting
3. Begin fall planting of perennials, shrubs, etc.
4. Put the greenhouse in condition for the winter
5. Keep the new strawberry bed clean
6. Sow cover crops wherever possible
7. Make the last succession plantings
8. Get ready for early harvesting
9. Put in plants for winter bloom
10. Make or remake the lawn now
11. Begin planting under glass

Madonna Lilies

Lilium Candidum

THE favorite Lily of the old-fashioned garden produces strong, stiff stems, studded with a mass of pure, glistening white flowers that enliven the Perennial Flower garden, or, for contrast with the beautiful green shrubs of the June garden, are unequaled.

Plant During Month of October

and enjoy a good crop of flowers next June, or pot up, store in cold frame, and force for early winter in the greenhouse or conservatory.

Our bulbs of this splendid Lily are grown in northern France, and are the true thick-petaled variety, which is much superior in habit and flowering qualities to that of the southern-grown bulbs.

First Size Bulbs . . . . . **$3.00 per doz.; $20.00 per 100**
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2 Pyramid Arborvitae *(Thuya Pyramidales).* Grows upright in columnar form; beautiful dense feathery foliage of a light green color at tips. Very hardy. 2 to 3 feet.

2 Greek Juniper *(Juniperus Strictas).* Of great beauty and adaptability. 1½ to 2 ft.

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These six evergreens, delivered, carefully packed and crated to the express carrier with full directions for planting, for

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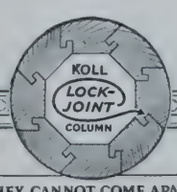

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(Continued from page 60)

paint cans, the rectangular kind, about one foot square and about fifteen inches long. In the bottom of these I punched some holes with nails and about an inch up from the bottom I punched a row of holes all around the can. Then I dug holes in the shrubbery border about ten feet apart and plunged these punched cans down into the soil, leaving two or three inches sticking above the surrounding soil, the overhanging shrubbery hiding the cans. Once a week I fill these five-gallon cans with water from the hose and I have found that this supplies all the moisture necessary to keep the shrubs in a flourishing condition during the dry weather. This year I planted some Dahlias among the shrubs and they have thrived wonderfully on account of this sub-irrigation plan. The scheme is not my own but I got the idea from my grandmother, who employed something similar to keep her hanging baskets moist and yet not have water dripping over the porch. She would take a baking powder box, about three or four inches deep and two inches in diameter and after punching holes in it would put it in the centre of the hanging baskets before filling the baskets with flowers. By filling this little tin cup each day the soil in the baskets was always kept moist and the flowers flourished.

THE PLANTS THAT WILL BLOOM IN WINTER

IF YOU are housing plants in your greenhouse for winter flowering be careful at this season of the year to see they do not suffer too much from the sun. Frequently the sun at this time of the year has exceptional force and will burn up the young plants before they get established in their winter home. Plants which have been ordered will probably arrive suffering more or less from their journey and these should be given shade for three or four days, no matter what may be the weather conditions. An easy way I have found to give these young plants shade, whether in the greenhouse or if they are being carried along in coldframes, is to sprinkle some dirt over the glass under which they have been placed. Sometimes I have washed the glass with mud, using a long-handled brush. About the first rain will wash off either but not before the young plants have become established. If the rain does not come after the fourth or fifth day I take the hose and wash off this temporary shade covering.

STOP THE CATERPILLAR CROP

AT THIS time of the year you should watch out for butterflies in the greenhouse. If you have started young plants in pots protect them with a covering of wire cloth so the butterflies cannot get on them to lay eggs, which later will hatch into caterpillars. I have by neglecting to do this lost hundreds of plants in a night.

WEEDS IN THE SEEDPANS

A FREQUENT complaint I hear from amateurs is that the soil they use for planting seeds is full of weeds and they have no way of sterilizing it and killing these weed seeds. There is a very easy way of overcoming this difficulty. In the first place the majority of amateurs raise more seedlings than they can conveniently use. For the average garden enough plants can be secured from using what is called a florist's pan, a terra cotta pot six or eight inches in diameter and about four inches deep. If these are used for raising seedlings, and it is what I use, your weed troubles are easily overcome. Fill the florist's pan with the soil and then place it in the kitchen oven for twenty minutes to half and hour and bake it. Being in the terra cotta pots it gets thoroughly cooked and all weed seeds, worms or other soil pests are destroyed.

STOCKS TO FOLLOW CHRYSANTHEMUMS

POSSIBLY you are considering this month what to plant in your greenhouse after the Chrysanthemums are finished along in the latter part of November. If you are facing such a question let me suggest you try for the indoors some of the Ten-Week Stocks, which certainly are showy, fragrant and will prove highly desirable for decorative purposes. Seed sown in September will germinate quickly and the little plants can be carried along in small pots until the Chrysanthemums are through and then planted on the bench which the larger flowers have occupied. Few persons realize that Stocks are most desirable for cut flower purposes and to have them at perfection they must be grown under glass in a cool house. While we have all admired the Stocks grown outdoors in the summer they are not to be compared with the same varieties when grown in a glass house. If you pinch off the top when the little plants are about four inches high you will like the result. Some of the winter flowering Gladioli are also good to follow the Chrysanthemums, particularly such varieties as Bride, Blushing Bride and Peach Blossom. A good way to handle these is to plant three or four bulbs in a pot and carry them along in the cold frame until the Chrysanthemums are through.

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An illustrated Catalog of Nursery Stocks; Evergreens, Evergreen Shrubs, Deciduous Trees, Flowering Shrubs, Hedge Plants, Hardy Vines, Fruits, and House Plants.
In your request for catalog, it is important to state definitely the kind of plants you intend to plant.

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PAGE
PROTECTION FENCE

(Continued from page 62)

KEEPING UP TO SCHEDULE

TRANSPLANT perennial seedlings and divide old clumps as early in the month as possible to get them established before freezing has a chance to heave them out of the ground. Dig Gladiolus the last of the month. It does them no good to remain too long in the ground.

Begin to save autumn leaves, the finest mulch for perennial borders and for bulb beds. Save hardwood leaves if possible, or pine needles, to cover the evergreen plants such as Moss-pink, or Creeping Phlox, hardy Candytuft, Arabis, Primroses and the like that can be picked off readily in spring and won't smother them. A light cover will do wonders for all such.

Cut off fading bloom of Perennial Phlox. Self-sown seedlings will be a nuisance and of poor colors. Cut down Perennial Asters as soon as they fade as they self sow and become weeds. Give Bearded Irises a dressing of bonemeal forked about their roots. This is the start of their growing season after a summer rest. Beardless Irises such as the Japanese Siberian, and spuria groups may be moved and divided this month.

MAKE A COLDFRAME

A COLDFRAME for a gardener is like a telephone, automobile, phonograph, or radio for the householder—if you haven't one you ought to get one at once. It is a public utility of the garden. There is no expensive upkeep. Any kind of a box with a glass cover which will shed water set over a patch of ground constitutes a cold frame and to a cold frame beginner, it is nothing short of marvellous what the seemingly feeble protection of the glass will do for plants sheltered by it.

September is coldframe month. If you haven't one, it is a simple matter to make one. The standard size is 6 x 6 ft. Calling for two sash. The sash either in double or single glass are sold by numerous firms. Knock-down coldframes can be had.

Sow seeds of Pansies, Violas, Wallflowers, and many of the perennials this month in the coldframe and they will bloom early next spring and you may have Pansies by Christmas and during thaws all winter. You can winter Chrysanthemums which will be a foot high when it is time to plant them out next spring. You can grow the bulbous Anemones (anemone Coronaria) for gorgeous bloom to cut in early April. You can start your spring seeds two months ahead of outdoor planting. You get a two-months start on the season and a two-months addition to summer by a coldframe. All you need is a box and a glass cover to set over a piece of well prepared soil. Bank it up with earth or leaves and there is the frame.

PLANT BULBS IN TIME

BULB planting is the big garden task toward the last of the month. Dig the soil early and incorporate bonemeal. Plant Daffodils first as they need the longest season, and so urge early delivery on your dealers. Tulips are better planted in October and most of the other spring bulbs can well wait; but Daffodils are impatient of being kept out of the soil too long, and late delivery is one cause of trouble with them.

TREE-PEONIES FROM SEED

LARGELY stimulated by the article on raising Tree-peonies from seed that appeared in The GARDEN MAGAZINE for June, 1923, many readers have made requests both to the Editors and to Professor Saunders, author of the article, for information as to possible sources of Tree-peony seed. There seems to be no available supply in the regular channels, but if there are any amateurs or others who have even a single capsule of seeds to dispose of, they would be doing a favor by communicating with Prof. A. P. Saunders, Clinton, N. Y.

LITTLE GARDEN PICTURES

PLANTING THOUGHT FOR SEPTEMBER

CLARA Butt Darwin Tulip, the finest pure pink late Tulip, shining against the drooping trusses of the Persian Lila is a little garden picture to linger in memory. A small clump of half a dozen bulbs shine out brilliantly against the dark foliage and lavender bloom of the Lilac. The same Tulip or the more brilliant pure rose Petrus Hondius backgrounded by Spirea VanHoutteii is worth traveling to see.

GARDEN MAGAZINE & HOME BUILDER

Vol. XL, No. 2 *OCTOBER, 1924*

Mattie Edwards Hewitt, Photo.

"In autumn I tuck all my bulbs to bed,
Little brown sleepy balls;
In spring each thrusts up
A gay greeting head
From beneath the white counterpane
Winter has spread
Over their tiny toes.
Tell me, who was it that said
Magic is dead?"

Amer Pindar

Poet's Narcissus, of course, like all garden folk, were once free folk, and so they look happiest when allowed to roam at will as in this naturalistic planting in Mrs. Finley J. Shepard's garden at Irvington-on-Hudson, N. Y.

Thomas Ellison, Photo.

"My garden is a pleasant place
Of sun glory and leaf grace."
Louise Driscoll

It is sometimes the "architectural features" of a garden that lend it emphasis and point as here at the home of Mr. William H. Murphy, Birmingham, Michigan. William Pitkin, Jr., Landscape Architect

Kenneth Clark, Photo.

"There is a little garden-close,
Girdled by golden apple trees,
That through the long sweet summer hours
Is haunted by the hum of bees."
Clinton Scollard

Nothing seems to equal the enclosed garden in friendliness especially when linked with the dwelling as at this New Canaan home, which conveys a particularly pleasant sense of unity. The garden was designed by Mrs. Ellen Shipman, the house by Messrs. Clark & Arms

NEWS AND COMMENT

SUNSHINE THROUGH THE QUARANTINE CLOUD

ON AUGUST 6th a statement was given out by Prof. W. C. O'Kane of the New Hampshire State Department of Agriculture, to the effect that, "all of the 48 states, together with British Columbia, Hawaii and Guam, have now ratified the findings of the conference on plant quarantines."

This referred to a meeting of state and federal plant quarantine officials (together with a few nurserymen and other interested observers) held in Washington late last April at the suggestion of, and under the auspices of, the Federal Horticultural Board; and to the findings, recommendations or "Basis of Agreement" unanimously adopted by that conference at the close of three days' deliberations. The recommendations were then submitted to a meeting of quarantine officials of the far West, held at Denver, and then to each of the states not represented at either of the meetings. The result, as noted, was that the entire Union has ratified the agreement (with three outlying regions thrown in for good measure) thus constituting what Prof. O'Kane (who was chairman of the conference) rightly calls a "highly gratifying outcome . . . and one which the florists and nurserymen, the plant quarantine officials, and the general public will find interesting and noteworthy."

Certainly it is noteworthy, for it is one of the few instances that come to mind in which, in connection with plant quarantine matters, real harmony and coöperation characterized the whole affair and as a result of which wholly constructive and commendable—and generally satisfactory—suggestions and recommendations were made.

VERY briefly, the objectives of the recommendations are: That there shall be more coöperation and less conflict or duplication in connection with state and federal legislation designed to protect plants and control insects and diseases; that it shall be understood that plant quarantines "should be established only when the economic benefit to a region, state, or county *clearly outweighs* the inconvenience, expense, and loss that such quarantines may occasion"; that restrictive quarantines "should be employed whenever their action will sufficiently accomplish the purpose sought"—complete quarantines or embargoes being resorted to only when restrictive measures are clearly inadequate; that state quarantines should be so limited in subject and scope as not to conflict with existing federal quarantines, although where the necessity exists supplemental regulations may be set up by states to give additional protection; that there shall be a freer and more frequent interchange of quarantine information and plans between the several states and the Federal Government to the end that all may keep informed of needs and tendencies and bring about most expeditiously and economically the desired degree of protection.

The importance of such principles is suggested by the fact that of 104 separate state quarantines affecting interstate plant shipments found to be in force at the time of the conference and reviewed by it, considerably more than half were found to be actually illegal or void in that they duplicated existing federal regulations. A result has been the withdrawal of a number of these quarantines, such as that proclaimed in 1923 by the Governor of Maryland against all Christmas trees and greens from gypsy moth infested sections of New England. This has now been modified to permit the introduction of any such material as may be certified as safe by the Federal authorities in the district of origin.

All over the country similar simplifications have occurred.

THE RICH LEGACY OF AN ENTHUSIAST

THE name John N. Gerard probably conveys little meaning to the majority of our present-day readers. He was one of the distinguished horticultural amateurs of the preceding generation. He had an absorbing affection for, and insatiable curiosity about, garden plants and grew in his New Jersey garden a host of things that are hardly heard of, even their names being almost unknown to-day. He started the American interest in species of Iris and closely allied plants and, if information is correct, he had sent him by a missionary the first Gladiolus primulinus bulb that came to America.

His method of collecting and reaching out for plants expresses his enthusiasm. He would look in the papers for news of travelers going to wild and unknown parts of the world and would then go to the pier at sailing time and, getting into conversation with them, would hand out a five or ten dollar bill with a request that any strange or curious flowers which they had never seen before might be dug up and sent over to him. These were the good old days of open untrammeled introduction of novelties when the amateur could follow the stimulus of enthusiasm without having it scrutinized and licensed by a board at Washington.

In the list of collaborators of the "Standard Cyclopedia of Horticulture" there appears against his name "Amateur Horticulturist. Many articles especially on bulbous plants as Crocus, Iris, Narcissus, etc."

Mr. Presby's tribute to him on another page is a worthy memorial by a worthy pupil.

WHAT A "SELF" REALLY IS

IT MAY be a question as to whether the mysteriousness of the Tulip has anything to do with its unquestioned popularity for, by and large, it occupies the most prominent place in the bulb category. The Daffodil has an esthetic appeal, a daintiness, a fairyness and grace of individual flower; the Hyacinth has slipped back in recent years because of grossness; but the Tulip has gone ahead.

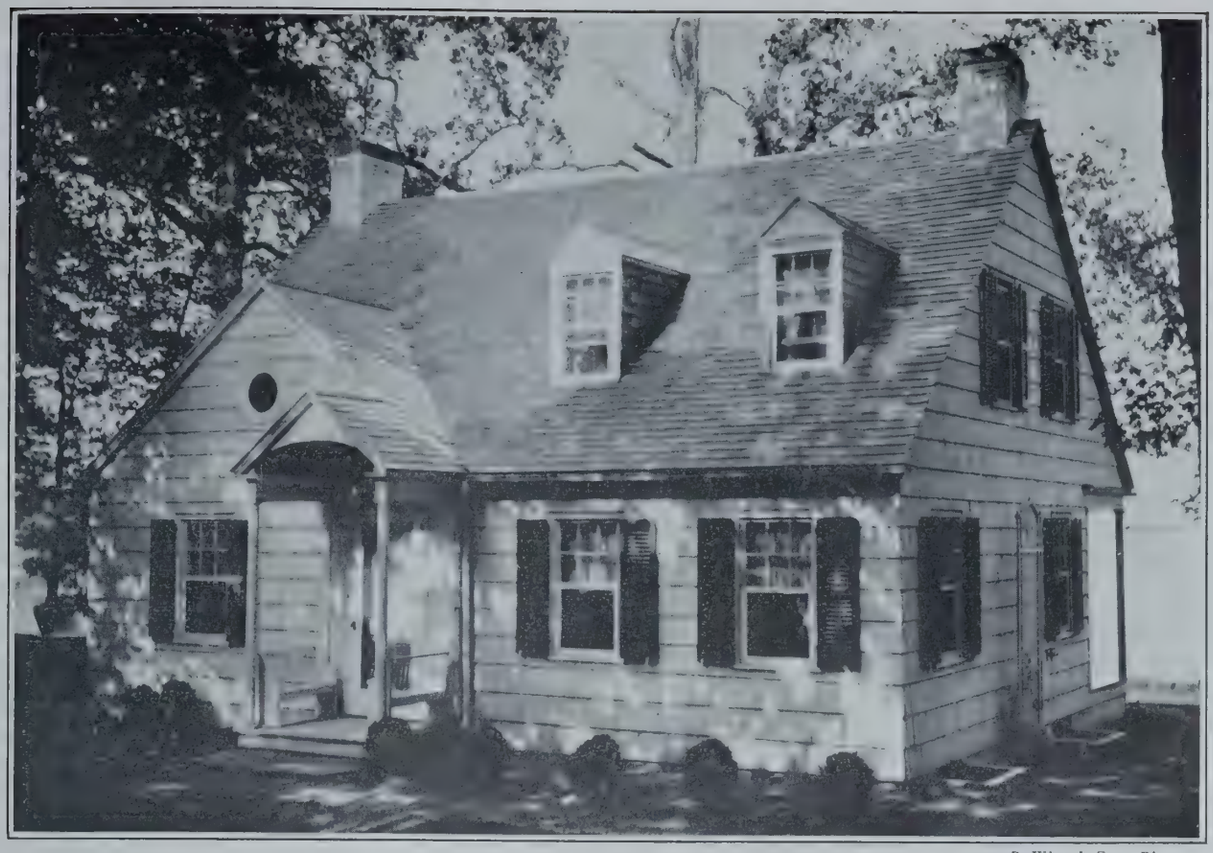
It is commonly thought of as a mass flower and rarely does one look inside of a Tulip bloom where lie rare and undreamed beauties.

The modern popularity of the "self" is remarkable. All Tulips raised from seed begin life as selfs, i.e. the flower is of a uniform color. Eventually, in the fullness of time this "selfness" will disappear, and as the butterfly emerges from the chrysalis, so does the glorified "broken" or "rectified" Show Tulip appear—the Parrot, the feathered or flamed Bizarres and many other such fantastic forms being only final evolutions from originally modest one-colored "selfs." Cultivators seem to believe that the "rectified" Tulip does not endure—as though having attained its magnificence of coloration, its purpose of being is fulfilled and it passes out. The old-time florists thought nothing of the seedling, or breeder, or self which was so frequently relegated to the humble cottage garden of that day—hence the name Cottage Tulip. It was the "rectified" form that was sought. Now all is changed; we pay little attention to rectification, and our gardens are improved by it, unquestionably.

"FLORISTS" NOW—AND THEN

CONFUSION something like bewilderment may easily develop from simple misunderstanding of what look like everyday words, for meanings of words change. This has very demonstrably been the case with the term "florist."

In modern practical America a florist is a man who sells or grows flowers and plants for decorative purposes; but there is an older and subtler meaning, that of "flower fancier"; which is what is signified when referring to the "old-time florists." This ancient brotherhood created for itself an artificial standard of perfection toward which they bred flowers with a mathematical precision that was both fascinating and alarming. This old gentry gave us the Gold-laced Polyanthus, the Show Dahlia, the Florists' Tulip, the Show Auricula, the Fancy Geranium, etc., etc., things that belong now to the ancient literature of gardening. Lest the reader may be led into a misinterpretation of the application it is well to bear in mind that the word "florist" in garden parlance does not necessarily bear the conventional meaning of today's use.



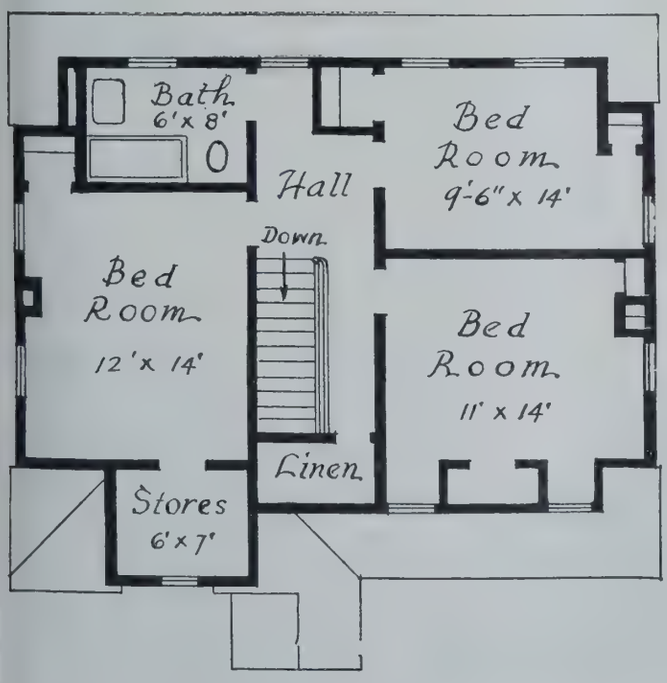
B. Winter's Sons, Photo.

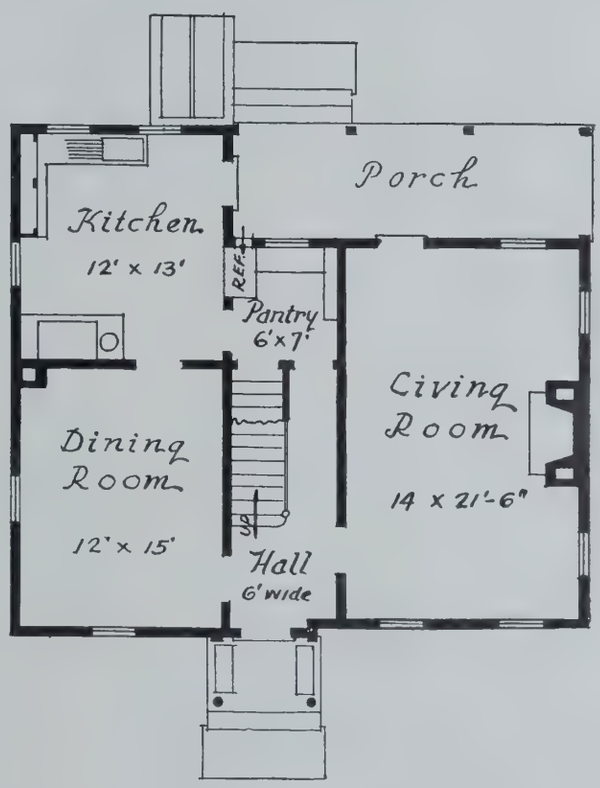
A Little Colonial Cottage

on the estate of Mrs. W. L. Harkness

at Glen Cove, New York

Charles S. Keefe, Architect





FRUITS THAT PAY THEIR BOARD
IN THE LITTLE GARDEN

RUTH GIPSON PLOWHEAD

Practicing "Scientific Shirking" by Choosing Insect-proof Kinds of Easy Cultivation

THERE is always a question as to whether the small garden can afford any fruit at all, but we have in our yard four kinds which we consider almost ideal for this purpose on account of their productiveness, decorative qualities, and their freedom from insect pests and diseases. Each growing thing, given time and room, means the elimination of something else which might prove more satisfactory and a true "garden fan," who has only a small plot of ground, and limited time, is as chary of the space allowed each plant as a miser of his gold.

HEADING the list is the Apricot, so highly praised by Mr. Rutledge in a recent issue of this magazine. His article called to mind our own experience with an Apricot tree in the back yard, which has given such pleasure and satisfaction that we consider it almost a personal friend.

Each year we date the earliness of the spring here in south-west Idaho by the blooming of the Apricot. Late in March or early in April it is a sheet of such airy pinkness that the back yard looks like a huge bouquet. And, Oh! the numerous bunches of blossoms it provides for eager hands to place on teacher's desk, and the joy it gives to dozens of beholders. We admit it takes up much space in a small yard, for it is unpruned and spreading, but where there are children there must be a shady nook for tea-parties and games, and what wonderful play-houses have been built beneath its branches!

This Apricot is the Moorpark variety. Its fruit starts ripening in early August, and ripens so gradually that the fruiting season lasts more than a month. However, the tree, which is some years old, does not bear every summer. Occasionally it vaunts its fluffy pink ruffles too early for the disdainful March breezes. But even in such seasons we feel that it has more than paid its ground rent.

The years when it does bear it is so prodigal of fruit that the whole neighborhood can enjoy it. Several hundred pounds of apricots would be a conservative estimate of what the tree bore last year. Fifty quarts of fruit were canned, several dozen jars of pineapple and apricot jam made, and friends and neighbors feasted on the fresh fruit for a number of weeks.

NEXT to the Apricot we place Grapes. For the "small garden" the Grape undoubtedly gives the largest return in fruit for the amount of space occupied. It will often utilize what we call "waste space." For instance, a Flame Tokay, which takes practically no ground space, is planted in a corner and trained about the house as a vine would be, and last year it produced about fifty bunches of grapes, some of them being very large. We use them in salads, gelatin desserts, and for eating from the hand, and as they sell in our town for from twenty-five to forty cents a pound this grape certainly repays us in money value, aside from enjoyment.

The vine, trained about the house, makes a most attractive corner. It is not hardy in our climate, so we planted it in a sheltered spot, where it gets the warmest sun rays, and each winter, when the cold weather comes, the canes are protected with straw and chaff.

A Sweetwater Grape has been trained over our back porch. This, too, furnishes welcome shade, and is a most prolific bearer, producing hundreds of bunches in the fall of 1923; in fact, so many that while it is the favorite eating grape of the family, the freezing weather found a number of bunches unpicked. One reason that it bears so freely is that it is well fertilized. The weekly irrigation of a nearby hotbed bears down to its roots a large amount of liquid manure.

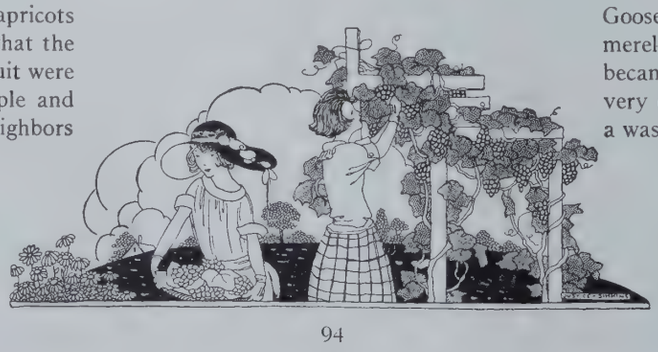
We also have a grape trellis leading from the back porch to the alley, and an arbor to cover the children's swing and playground. Covering these are: Diamond, Concord, Brilliant, Delaware, Moore Early, and Niagara. The boys get the grapes which are planted along the back fence, but we are sure they enjoy them.

One year we noticed that a large number of grapes were being taken from the yard. Hearing quite a commotion one day, I went out and found five little boys boldly and liberally helping themselves. I delivered them quite a lecture about taking property without permission, and sweetened it with a large bunch of grapes for each boy. I ended with:

"And now remember, boys, you are not to steal grapes. When you want anything, always ask for it."

About fifteen minutes later there was a loud rap at the back door. Those five boys stood there, and grouped behind were *ten* more.

"Please, Missis," they said, "can we have some grapes?"



AMONG Raspberries we think both Ranere (St. Regis) Everbearing and Early Summer very desirable for the small garden. Aside from the satisfaction of having fresh berries when we want them, if we paid the prevailing market price for all the berries we gather it would amount to between ten and twenty dollars, according to the season. We have a long double row by the side fence and they bear almost more than we wish they would when it comes to picking them on a hot summer day. We have only a few Everbearing, but they give berries until late October.

THE Progressive Strawberry (Everbearing) is the last of the group of four fruits. Well cultivated and cared for, a small patch will give four distinct crops. The devoted adherent of strawberry short-cake may now have this delicacy in October, made of berries fresh from his own garden.

NONE of these fruits has been bothered with diseases or insect pests, as have some other fruits that have been discarded on that account. The Florence Crab is lovely as a spring-blooming tree, its fragrance being particularly delightful, but to comply with our state laws, we had to spray it four times each season for scale and moth. The Cherries were bothered with slugs which almost denuded the trees, and if the fruit was allowed to ripen enough to be really delicious, the robins got a large share.

The green worms ate the leaves from the Gooseberries and Currants until they were merely skeleton ribs. Prunes and Plums became scaly, necessitating spray, and are so very cheap in our community that it seemed a waste of good garden space to grow them.

We know these insect pests and disease can be controlled, but in the busy man's garden scientific shirking must be practiced by choosing fruits, vegetables, and flowers of easiest cultivation.

A sense of airy comfort pervades this pleasant sun room in the home of Miss Billie Burke at Hastings-on-Hudson, N. Y.

LIVING IN THE SUNSHINE

MR. and MRS. G. GLEN GOULD

Photographs by Mattie Edwards Hewitt and by courtesy of the Arden Studios and Chamberlain Dodds

Furnishing the Sun Room for Comfort and Cheer and Everyday Enjoyment

THE "conservatory" of our great-aunts, where they carefully tended their Fuchsias and Rose Geraniums, has practically disappeared from the modern house and set up for itself an efficient place somewhere in the garden. But its lack is felt. The sun room logically attempts to fill this lack, as it does the place of breakfast on the terrace, and of the summer porch through the long winter time. The subject of furnishing this room has become as complex as furnishing the entire house, for it has appropriated to itself the function of every room in the house except the kitchen; and there can even be found cases of cooking as well as eating "out on the porch."

Since the primary function of the room is to bring the out-of-doors into the house, it obviously needs not only growing things but a sense of sunlight and air as well—if either be lacking it is not fulfilling its entire function. It may be set amid an orchard; it may be but a step from a garden terrace; or it may command a view of valleys, trees, and mountains; it may look upon a city or a sea, but whatever its setting, be sure that the sun room itself accommodates some greenery throughout the year.

Instead of waiting until the furniture is placed and then setting pots of Ivy here and

there to complete the picture, the place of plants in the sun room should be given first consideration. One motto of the new school of French design is: "When in doubt use black." The decorator to-day accepts an equally easy panacea: "When in doubt use Ivy"; and too often nothing but Ivy is used.

If growing things are to find a place in the sun room, they must really grow, and ought logically to be placed to their best advantage for sun and air. Be careful, however, that they do not trespass on the rights of the master of the house, if he wants a place on the railing for—well, any purpose! Men like broad comfortable window sills, balcony rails, and ledges. This element is too often lacking in the sun room, yet where has a window seat so splendid an advantage?

AFTER the greenery is provided for, place in the mind's eye, or on paper if more convenient, the most necessary, most important, or most interesting article in the room. Put it exactly where you want it and do not shift it at any one's importuning, unless you are sure you want it some other place.

It is essential in house furnishing to make up one's mind to one of two issues: compose a picture by decorating a room; or furnish a livable room with all the harmony and beauty possible to its livableness. The results will conform to whichever aim is chosen. Any one can put a dining table in the center of the sun porch, with two, four, or six chairs around it, and a serving table against the house wall. But, if by placing the breakfast or lunch table where a particularly attractive view can be obtained, or the sunlight gained or avoided as may be desired, the composition of the whole room is thrown out of gear, it can be brought back into a harmonious whole by the skilful arrangement of the remainder of the furniture.

THE furnishing problem, as to arrangement, can advantageously be worked out by the same simple method that a certain well known painter uses in his plans for decorating the window of a large store. He first takes the thing that is to be specially featured and places it where it will show to the best advantage; then takes a second, placing it in a natural relation to the first; thus his problem in composition is started. The other objects must bear witness to the importance of the first object placed, enhance its importance, vivify its color, and be subordinate to it in every respect. In this way the object of first importance sings, as it were, "a solo." If two articles are equally important, they should be given the relative value of singers in "a duet." Where nothing should take precedence in a room, this plan of working must be reversed, and the whole grouping arranged for harmonious unity as in "a chorus."

Of course, to furnish a room in just this way requires more knowledge than the ordinary interior decorator can bring to bear upon the problem, for it presupposes the skill of the painter who is able to assemble any kind of objects in any kind of location and so arrange them that their combination is an "art composition." All of which may frighten the ordinary householder into a conviction of personal incompetence—the first handicap to be gotten rid of before attempting anything.

Practically every American boy and girl does considerable pencil and color work at school between the ages of six and fourteen, and principles of furniture arrangement are not at all beyond the acquaintance with design thus acquired so that it is only necessary for you to focus this skill on the problem of your sun room. It is really great fun to try out things with actual tables, chairs, and couches; and is no more difficult than arranging an acceptable "still life" group on the desk at school.

AS SUN rooms are of many sorts and put to differing uses, the type of furnishing naturally varies considerably to fit individual requirements, but the following practical suggestions may well be borne in mind when making your initial plan.

Sun porch: Wanted—easy chairs, couches, chaise longue, couch hammock, tables, the radio, cushions, plants, perhaps an aquarium and a bird cage. If you never lie down on the porch, don't have a hammock or a couch; a chaise lounge will do in an emergency. If you want easy chairs, try them to prove they are easy. If you like deep-seated chairs, choose them; but include a shallow seat or two for guests who may be otherwise inclined. If you sit at ease in a shallow seat, have them shallow, with a deep seat for guests of a different build. Place the chairs you are going to sit in where you really want them; then group the others, putting small tables within arm's reach. Every needed thing should be within arm's reach if one is to sit at ease. For furniture there is preferably split rattan, next reed and willow, then fiber; afterward unfinished hickory or other woods, possibly painted and decorated furniture; and, not to be forgotten, iron properly cushioned. For cushions: denim, plain or with small figures; or sunfast stripes, blocks, cretonne, plain or glazed, and chintz; but above all have the textiles sunfast. The rugs should be plain or simply bordered so as not to confuse the lowered eyes in reading, knitting or resting.

Breakfast room: Painted furniture in bright colorings, as gay as opening Morning-glories; hangings no less colorful, but sunfast. Chairs not too comfortable, firm and upright to wake you up. If the breakfast room serves for luncheon too, the furniture may appropriately be split rattan or reed. The rug may be colorful, or smart in blocks or stripes, provided the room is not lived in between meals; or the floor may be rugless, in wood, tile or its imitation, marbleized or plain. The eyes are normally on the table on a dining porch, and the floor may be as distinctive and smart as desired without troubling the eye.

Living room: For all the year more elaboration is acceptable. The floors may be blocked, with rush rugs for summer, but put soft domestic or Oriental rugs down for winter days. Individual taste will vary the rugs of the winter season endlessly. The furniture may be anything except finely finished woods; and upholstery anything except silks and velvets. Curtains should be sunfast. Within this wide range, the winter sun room for general living may be furnished as variously as any living room. When the sun room is very large, the furniture may fall naturally into several groups, one at the fireside, another around the dining table, and others grouped for the outlook.

Lattice plays as universal a part as Ivy in the sun rooms of to-day. Tiny fountains would be more generally used if their inexpensiveness were better understood.

Comfort is the main thing; then beauty. It is a curious thing that because comfort is a natural, normal requirement, when we achieve true comfort, we are in a good way of getting something beautiful.

Right and Wrong Time to Prune

THERE is always a strong desire to prune trees and shrubs in frosty weather when other work about the garden is at a standstill. Frequently amateurs are urged by some self-styled gardener, who professes to know all about pruning, to apply the shears and knife when the air is sharp and cold. Experience has taught me to oppose such practices for two reasons: First, the wood in frosty weather is usually more brittle and consequently there is more or less tendency to crack and split rather than to take a clean cut. Second: while it is quite true that the amputation of a branch during severe frost may not kill, a fresh wound is more susceptible to injury from an extreme in temperature than an uncut surface.

Many amateurs make a mistake of pruning evergreen shrubs (such as Arborvitae, Cedar, Juniper, Retinosporos, etc.,) in the fall. There is, of course, little danger of doing such plants any great harm by pruning at any time of the year, for the general object in pruning them is to induce a more compact growth. My reason for suggesting that it is not well to prune in the fall is that throughout the winter their appearance is not as pleasing, as there is no new growth to cover the marks of the pruning shears. If such plants are pruned when the new growth is starting up about May the bareness caused by pruning is soon covered by the fluffy new growth and the garden presents a much better appearance than if cut ends are allowed to be exposed for six months or more.

FURNITURE ARRANGED IN "DUET" FASHION

If two articles are equally important, they should be given the relative values of singers in a duet, as in this arrangement by A. Chamberlain Dodds, so skillful as to appear almost inevitable, one might say

Lattice and Ivy are not missing in this ample sun room. The fireside and dining table groups here sing "the duet," the other furnishings coming in as "a chorus." Decorated by the Arden Studios

Since the primary function of a sun room is to bring the out-of-doors into the house, it obviously needs not only growing things but a sense of sunlight and air as well. Home of the decorator, Mr. A. Chamberlain Dodds at Greenwich, Conn.

THE MAKINGS OF A HAPPY GARDEN

LOUISE ENGLISH

September's Ideal Opportunity for Producing Spring Effects—Prolonging Flower Friendships and the Part Imagination Plays

Photographs by Mattie Edwards Hewitt and Harry G. Healy

A GARDEN may be regarded as the tangible product or expression of five forces working together: (1) our imagination, (2) our intelligence, (3) our sense of color values, (4) our practical working knowledge of the plants, and (5) our love for flowers.

Intelligence is needed to overcome the natural difficulties of location, soil, surroundings; to bring the conditions into harmony with the existing landscape or next door's garage; and in choosing the flower people who are to live with you. A sense of color value is a more or less natural talent. Knowledge of the individual habits, needs, preferences of the plants you work with is absolutely essential to the maker of a garden, for you can no more mix helter-skelter plants of different types than you can people of different nationalities, and get harmonious results. This working knowledge of the plants can only be acquired by practical experience. First and last and always a beautiful garden is the result of a great and absorbing love of flowers. For that is the divine spark.

A garden without hardy plants is like a dance without music—the rhythm, life, inspiration are not there! A garden is essentially a place of associations, romance, friendships which year by year grow in value and interest. This means there must be some permanency—old friends who "stay put" and do not go frisking off forever just because their noses become slightly frost-bitten or because something else has happened that they don't quite like. I am not belittling annuals. There are certain ones we cannot do without if we wish to keep a bright garden all summer or soften some dull spot which some hardy plant has left after it has done its bit and decided to take a vacation for a year. But for all-round stability and life we must depend on the hardy perennial.

QUEENS OF THE HARDY GARDEN

LEADING the long list of stately queens, come Iris, Peonies, and Roses which, though really shrubs, I prefer to consider in our present group.

One can hardly think of a hardy garden without the Larkspurs so easily grown from seed and so easy to handle. They are misunderstood; and it is our loss. There is a general impression that they are difficult subjects, expensive, requiring much sun and a great deal of room. Potted plants or large field clumps of Delphinium belladonna set out in the fall will blossom the next June, tall, full-fledged beauties, towering over all other flowers at that time and having the appearance of really owning the garden. Young plants set out in the spring will blossom after the fall-planted ones are through for a time. This younger generation will carry on the blue spires well into September, always providing they are not allowed to go to seed; and meanwhile the entirely grown up, experienced, autumn-planted Delphiniums have decided to bloom again, and so you have a succession throughout the summer. If you are enterprising, you will plant a few belladonna seeds in a flat of carefully sifted and prepared earth in March or April, put it in a light window and water daily until the seedlings are large enough to transplant. Then pot off singly into $2\frac{1}{2}$ in. pots, still keeping them in the sun and well watered until the latter part of May. The plants do not insist on full sun in the garden. The Belladonna Larkspur also has particular friends that she likes to associate with and it really pays to see that she gets them. Pink Phlox, white Phlox Miss Lingard, creamy white Lupins, pink Foxgloves, purple or white Japanese Bellflowers; down at her feet Cheddar Pinks are tremendously becoming, as are purple Violas. Or she may use pink Sweet William for a footstool. Nothing in my whole garden was more soul-satisfying last summer than a group of late belladonnas closely planted with many Gladiolus America. To a lover of color the light pinks and light blues coming in September have almost an intoxicating effect.

FOR BEAUTY OF COLOR

AND now a plea for the scraggly sisterhood. Beautifully colored plants with floppy, indolent, rather selfish habits. The fact that they lean on their neighbor's backbone causes them to be barred from many well-kept gardens. Yet if they are properly staked and tied up and their natural impulses somewhat restrained they are most delectable—I mean the Sages, Boltonias, Michaelmas Daisies, Heleniums, Anchusa italica.

Three Sages are my friends—azurea, farinacea, and patens. Of the three Salvia patens is the most remarkable in coloring—a clear, deep blue velvet, startling in its intensity, and most valuable on account of its September flowering. It seems a little more tidy than its sister azurea. Ordinarily S. azurea flops her long arms around in a most objectionable manner, forming thin, inharmonious lines which even her charming sky-blue color cannot hide. This was overcome by planting quite close to several large bushy plants of white Boltonia. S. farinacea deserves more place in our gardens if it is grown in quantity. One plant alone fades into the background and is lost, whereas masses and long lines of this soft lavender are particularly appreciated in August and September for their suggestion of coolness and space. In spite of the catalogues, this Sage is not blue. And speaking of blue, Plumbago capensis, or as it came labelled to me Ceratostigma plumbaginoides, is an adaptable, cheerful little blue-flowered plant preferring some shade if possible; also an August and September blossomer. My plant is nestled up against the wall of a cellar door in the shade with three wild Maidenhair Ferns for company, and has been having a wonderful time for two years. It spreads rapidly but comes up above ground very late in the spring, so don't get discouraged and dig out the roots if you see no signs of life long after everything has been working for weeks.

The Globe-thistle I have decided to adopt permanently. In both foliage and flower this strange plant, about as unlike our general run of garden visitors as possible, suggests something that might have been grown from a seed blown down from some distant star or planet.

Another flower to use more freely is the Blue Flax, though this, too, is a bit uncanny in its strange habit of throwing away all its tiny blue petals early in the afternoon each day and appearing the next morning with an entirely new set. Pale yellow Columbine chrysantha is a most wonderful friend and neighbor for the Flax. Both are quite fairy-like.

STURDY PIONEERS THAT STILL PERSIST

THERE is a class of perennials known as "old-fashioned," loved as much for their association with our grandmothers' gardens as for their own beauty: Hollyhocks, doomed by Mistress Mary always to be planted in a row; Sweet Williams, Clove Pinks, Bleeding-heart, Old-man, Monkshood, Sweet-rocket, Johnny-jump-ups. All are sturdy, independent flowers requiring very little effort to grow. Many grandmothers were very busy people and they needed staunch, reliable plants that didn't have to be coddled. These "old-fashioned" ones are still available, and adapt themselves perfectly well, in improved form indeed, to present-day conditions.

Quite different are the low-growing, rather

brilliant, spreading plants referred to as rock-garden plants, but which often do perfectly well in ordinary gardens, especially if they are given rock edges, and they can be planted among our bulbs without endangering the welfare of either.

SOME PRACTICAL REMINDERS

BECAUSE a perennial is "hardy" it does not of necessity follow that it is quite capable of looking after itself, being just set in the ground and serenely allowed to live its own life forever after. Too often, I think, we feel that our responsibility toward a plant ends forever when we have dug a hole in the ground and tucked its roots away. "I have done my part, now you do yours." We expect a miracle. Success with flowers is never a matter of *luck*.

First there is the matter of feeding. Well more than half the gardens I come in contact with are lean and hungry and crying out for food. This feeding process needs to begin *before* the plants have arrived to take possession. Rich, old, well-rooted horse or cow manure, bonemeal, and, if possible, old dead leaves should be most thoroughly spaded and mixed into soil made as loose and fine as possible. A little later in the summer a slight top-dressing of dried sheep manure or fine bonemeal should be hoed or raked into the soil near the roots of the plants, or mild applications of liquid cow or chicken manure given. Of course, carefully watch the results and do not over-stimulate, but I have seen many more cases of starvation than of overstimulation. Less food is needed by the plant after the blooming period is passed, but even then it needs some attention to help pick up strength to face the long winter. A plant that enters the winter in strong health will greet you most enthusiastically next spring.

Watering is closely connected with feeding, and unless there is water enough or time enough to do this watering thoroughly it is better not to attempt it at all. Most perennials, particularly the tall ones, are deep rooted and mere surface watering not only does no good, but in a heavy soil causes a thick heavy crust to form on top of the earth which is about as good as a cement floor for these flower people. It is better to take a small portion of the garden at a time and water that until the water has really gotten down to the lower roots than to "play" a hose over the surface of the whole garden.

Another important point is watching for seed-pods; or rather, never allowing seed-pods to form. The plants' chief aim and reason for existence is propagation. A plant that has been allowed to go to seed entirely, seems to lose all its ambition for the season and becomes slovenly.

"Hoeing up" around each plant during the process of weeding or cultivating is a pernicious, obnoxious habit. Though a few plants, like the Potato, may enjoy having their crowns covered with an inch or so of earth, most of them do not like it—will not stand it, in fact, and so soon die.

Close, heavy, stuffy coverings in the winter over the crowns of many plants are responsible for their non-reappearance in spring—Foxgloves, for instance. A light porous covering of leaves, brush, old evergreen boughs, directly on the plants with the heavy blankets of straw and manure on the spaces *in between* if need be, allows a certain amount of air and ventilation. Truly, as many plants are killed from careless, heavy mulching as from almost any other cause. After the mulch goes on, keep a close watch for mice, rats, moles, rabbits, and other furry intruders, so don't think that when you have put the garden to bed for the winter you may forget all about it and take a rest. There is no rest for a gardener, although there is much peace of mind and great content.

AUTUMN'S OPPORTUNITY FOR PLANTING PERENNIALS

FALL planting for producing spring gardens is my especial joy and hobby, and I am not exaggerating the importance of the subject by saying that the success and harmony of your whole garden depends upon your attitude of mind toward it during September and October. To most of us the ideal spring garden is a vision—a mental conception of beauty we have never quite succeeded in realizing—something not really unattainable, but a thing which always seems to just elude our grasp. "Next year it will be different." Then we forget for a while—and next year comes, with the vision still ahead of us while we ruefully survey large patches of soft brown earth dotted here and there with a hopeful Tulip and some green spikes. And then in a desperate effort to hide shortcoming and a want of forethought we hurry to the nearest nursery to load our arms with whatever happens to look inspiring. What generally happens is a tragedy—a free for all fight in which many a delicate and lovely thing is lost while a few of the "rough-necks" survive to inherit the earth. Late summer is the time to give thought and work to your garden. September days are sunshiny, September nights are cool and refreshing, and young hardy plants that are set out then hardly know that their home has been changed. And after that there are weeks for the planting of bulbs. Now is the time to lift and divide many of your old plants. We have only to observe the activity of large nurseries to realize that we are missing an opportunity of doing the same thing on a smaller scale. Some plants are especially adapted to fall planting and will give early spring and summer blossoms. These are rather low-growing, bright flowering little people coming in May and June, and especially

GARDEN OF MR. ALFRED C. RODE AT LAKE MAHOPAC, N. Y.

Sweet Williams, Phlox, Gypsophila, Clove Pinks and other perennials make a running band of color along the margin of the lawn

(*Mattie Edwards Hewitt, Photo.*)

In the Garden Magazine Demonstration Gardens

ONLY THREE MONTHS AFTER PLANTING

Last spring it was decided to add an "old-fashioned garden" to the series of gardens here on the home grounds of Garden Magazine & Home Builder *and a plan was accordingly made by Mr. Hammond Sadler, Landscape Architect, who, in consultation with Mr. Barron, had previously designed and planted the rock garden and the rose garden, thus welding the various parts into a harmoniously grouped whole.*

This summer flower garden of herbaceous plants is designed to display the picture possibilities of well known hardy plants that are quite familiar to every gardener. We shall have more to say about our demonstration gardens from time to time. When photographed on August 16th the garden was bright with color—chiefly blue, gold and white—and in the hardy border shown above we have Veronica subsessilis, Larkspur, Coreopsis, Shasta Daisy, Carpathian Harebell, Artemesia lactiflora, Phlox, Hollyhock, Allwood Pink, and other perennial familiars. The tree at the right is of evergreens—White Pine and Red Cedar.

good for gardeners who go away during the middle of the summer. Many of these plants are lovely planted with bulbs, and their shallow root system in no way interferes with the bulb's growth. Arabis alpina is one of the most important, planted with Cottage Maid or Inglescombe Pink Tulips to make a pink and white combination.

Mertensia you have probably seen growing near canals or brooks with its adorable little pink bells which change to a clear light blue as they grow up. Strange as it may seem, this shy-looking flower can easily be coaxed to live in the ordinary soil of our gardens. I have some four- or five-year-old roots which come up every year near an old and venerable Bleeding-heart, in happy companionship. After the blue bells are through for the year, the leaves linger a while, then disappear, and some light-rooting annual may be placed beside it to spread over the ground and keep the strange looking root moist and shaded throughout the summer.

KEEPING DOWN THE COAL BILL

PHIL M. RILEY

How to Heat Your Home Most Economically—Considering the Furnace as a Permanent Investment—Different Types and Where They Work Best—Formula for Figuring Exact Amount of Radiation

THE central heating plant is rightly regarded as one of the most vitally important items of home equipment. Upon it in large measure depends the comfort and health of the family for six or seven months of every year in the greater part of the land. It is not a thing to economize on. A good heating plant is a life investment and initial cost is invariably given too much consideration, and the coal it will consume too little. Efficient and effective operation are the chief points to be considered rather than low first cost. They involve not only the right heater for the work required of it, but proper installation. It follows that one should deal only with reputable and experienced heating engineers. Having found such a firm, one does well to defer to its expert judgment. It is helpful, however, for the prospective home builder to understand something of the basic principles of efficient heating methods.

The modern home is usually warmed by one of three methods; hot-air furnace, hot water, or steam heater. In general it may be said that the choice depends on the house and its location. For a small house economy of operation suggests a hot-air furnace or hot-water heater. For a medium-sized house hot water is preferable and for a large house steam, although hot-water systems are giving satisfaction in a rapidly increasing number of large houses.

THE hot-air furnace, the pioneer type of central heating plant, is regarded by many as old-fashioned and antiquated. Manufacturers have so improved it, however, that the best models are efficient heaters and particularly well suited to small low-cost houses where the cost of hot-water apparatus would be prohibitive.

The hot-air furnace has several points in its favor, chief among which is the fact that pure cold air is brought in from outside, heated and circulated throughout the house, the air being given a proper degree of humidity by a pan of evaporating water provided as part of the heater equipment. But fail to keep that pan constantly filled with water, and all the claims of manufacturers regarding the superiority of hot-water and steam heating systems are amply justified. The furnace becomes a superheater of air evaporating all the moisture from it and robbing it of stimulating vitality. One feels cold though the temperature be well above 70 degrees F., the sensitive tissues of the throat and nose become inflamed and cannot resist the attacks of germs; coughs, colds and rough skin result, not to mention the effect of excessive shrinking of fine furniture and woodwork in the home.

The principal drawback about a hot-air furnace is the fact that in windy weather the hot air is driven back from the windy side of the house and circulation impaired. For this reason it is not as effective as other heating systems for houses in exposed locations unless sheltered on the windward side by other buildings or a windbreak of trees. However, this defect may be greatly obviated by locating the furnace, not in the center of the basement, but nearer the side of the prevailing winter winds. It is also a help to arrange the cold air box so as to draw cold air from outdoors in mild weather and from indoors in severely cold, windy weather. Make sure, however, that the brick or galvanized steel casing of the furnace is absolutely air tight so that foul cellar air is not circulated to the rooms above.

Much of the success of a hot air heating plant depends on proper piping. The pipes must be large and have an adequate upward pitch from the top of the heater. This means that only in a cellar of good depth will a hot-air furnace prove satisfactory. Long horizontal runs inevitably mean cold rooms. Pipes must be kept as close to the heater as possible, and for second-floor rooms double-jacketed or asbestos covered pipes are desirable, as much heat goes to waste in the partitions when single pipes are used. Floor registers are preferable for the first story, wall registers for the second story.

With a single-pipe furnace most of these piping considerations are eliminated and great heating economy results. But such a furnace is suited only to small houses so planned that heat from a single central register will reach every room readily. Obviously, too, closed rooms are not heated.

Be sure that the furnace is large enough. A furnace larger than is actually required is preferable to one that is smaller, for a slow fire in a large fire-pot is more economical than a forced fire in a small fire-pot. The sides of the fire-pot should preferably be corrugated, as it adds to the strength and life of the metal. All interior parts of the furnace should be large and smooth to avoid catching carbon and fouling the fire ways.

Combination hot-air and hot-water heaters provide an economical plant for homes of moderate size. They are really furnaces having a hot-water coil in the fire-pot that is connected with a few radiators on the second floor, the first-floor rooms being heated by hot-air pipes.

HOT water is the ideal heating system for homes of medium size. It approximates the action of the sun, providing an abundance of naturally moist health-giving air warmed to a moderate temperature. With it a constant, even heat is assured easily and economically wherever the pipes go regardless of exposure or the direction of the wind outside. The cost of installation is somewhat more than for steam because of the larger radiators required and the fact that it is necessarily a double-pipe system. Hot-water systems are economical to operate, especially in mild spring and fall weather. Water is so sensitive that a low fire will circulate warm water through the rooms and keep the house at a comfortable, even temperature. Livening of the fire brings a quick response in higher radiator temperature. Maintaining constant, even heat by automatic regulation is simple and easy.

With a steam heating plant, on the other hand, it is steam or nothing—steam temperature or no heat. Automatic regulation is difficult in mild weather, as it can be obtained only by short periods of full heat in alternation with longer intervals of no heat, and considerable variations in temperature are inevitable. Steam is easily forced wherever the pipes lead and for that reason is most effective and economical in severe climates, large houses, and exposed locations.

ANY of several leading makes of hot-water and steam boilers will render good service. Adequate size is rather more important. Heaters have become so standardized

that most manufacturers employ similar models, as is the case in plumbing fixtures, though each manufacturer claims certain points of superiority in design. As compared with the life of the average old-fashioned hot-air heating plant, which was only a few years, the best modern hot-water and steam heating systems are impervious to rust and will last a lifetime, paying for themselves in the fuel they save in three to five years' time, and thereafter saving from one fourth to one third of the money which would otherwise have been spent for coal.

Low pressure hot-water circulation, maintained by an expansion tank providing an air cushion in the system, replaces the open expansion tank and automatic circulator of former days and ensures prompt circulation through every radiator in the house. When an outside garage is to be heated by the house hot-water plant it is a wise precaution to pipe through one of the radiators on the second floor. As hot water rises more readily than it moves in a horizontal direction this scheme of piping helps to start prompt and to maintain constant circulation.

IT IS just as advisable to buy a hot-water or steam boiler larger than is required as a large hot-air furnace. A small boiler will have to be forced in severe weather and that is not full economy. The general practice is to choose a boiler half as large again as is required by the amount of radiation. For example, if a house requires 600 feet of radiation, install a 900-foot boiler.

Finding the size of boiler and the size of radiators for each room has been reduced to a matter of simple arithmetic. First find the number of cubic feet of air in each room by multiplying length, width, and height together. Then determine the exposed (outside) wall surface in square feet less the glass area of windows and doors. Also measure the number of square feet of glass.

Divide the wall surface by 10, which gives the glass equivalent. Add this quotient to the glass surface. Then multiply this sum by 75 and add the product to the number of cubic feet of air in the room. Finally multiply this sum by .0092 for hot-water, or by .0055 for steam. This gives the number of square feet of radiation required for each room for hot water at 165 degrees F. or steam at one pound pressure with the outside temperature at zero.

Adding together the amount of radiation required for each room and adding 50 per cent. to the sum indicates the size of boiler required to heat the house. Vertical boilers are preferable for houses of moderate size, horizontal boilers for large houses. Ample flue ways easy to keep clean are important, and extra large flues for using soft coal.

Fuel economy demands that the boiler and basement piping be covered with asbestos or magnesia covering. This avoids waste radiation, keeps the cellar cooler and the upstairs rooms warmer. In two or three seasons the saving in coal often pays the cost of the covering. The home builder can buy the material and do the job himself if he cares to.

EXCEPT in exposed locations and where winters are severe, steam heating plants are chiefly confined to large houses. A steam plant is somewhat cheaper than hot water because only one pipe is required to the radiators, which are smaller than hot-water radiators owing to the higher temperature of steam. A steam boiler is much like a hot-water boiler, except for the dome at the top where steam collects from the boiling water below.

An indicating pressure gauge and a safety valve are necessary, the latter to relieve the system should the pressure become too high.

Snapping and thumping of pipes, a common objection to steam heating, may be entirely avoided by laying pipes with a slope to drain back to the boiler, and by making allowance for sufficient expansion of joints to allow pipes to expand and contract when alternately hot and cold.

Radiators are chiefly of cast iron, though pressed steel radiators are now obtainable and are much smaller and lighter, an advantage in small rooms and where floor loads need to be as light as possible. While there are radiators for many special purposes—for example, plate-warming radiators for the pantry—and radiator furniture to improve the appearance of radiators and even to make them serve other purposes than mere heating, three-column cast-iron radiators are the prevailing type. One and two-column types are provided for small rooms and large wall spaces, short four-column types for low wall spaces. Radiators are least in the way and most efficient when located under windows, where fresh cold air is warmed as fast as it comes in. Plain quick-opening valves are used on both hot-water and steam radiators, but loose-key air valves are preferable for hot-water radiators, automatic valves for steam.

As hot water circulates more rapidly through the vertical second and third-floor pipes than through the horizontal first-floor pipes, due allowance must be made in the size and arrangement of the piping or the upper rooms will receive more than their share of heat and the lower rooms will be too cold. Smaller pipes will serve the radiators in the upper rooms, while for the lower radiators the horizontal pipes should not only be large but as short and free from bends as possible, and have a generous slope.

FOR easy and efficient control of the heating plant depend upon a thermostat, of which there are several good makes on the market, operated by clock work, electricity, or compressed air. They are as desirable on hot-air furnaces as on hot-water and steam boilers, and their cost is so small compared with the work they do and the fuel they save that they may be considered a good investment.

A thermostat consists of a little instrument attached to the wall of the living room, or wherever the average temperature of the house is maintained. When set for the temperature desired it automatically controls the fire in the heater by opening and closing the drafts. Some thermostats have an auxiliary clock so arranged that a slow fire may be maintained through the night and at an early hour in the morning the draft is automatically opened to warm the house before arising time. As a matter of fact there is little economy in this, except possibly in mild weather, as the forced fire required to heat a cold house quickly consumes as much or even more fuel than maintaining a constant temperature of 70 degrees F. throughout the night.

Important as is the right heating plant properly installed for the work it will be called upon to do, its success after all depends largely on the person who runs it. Nor is it so much the amount or quality of the coal burned, as intelligent operation which heats the house. From the standpoint of both economy and health a slow, easy-burning fire is ideal, and a careful study of the instruction book now furnished with every high-grade heater will tell how to obtain house comfort from such a fire with the heater chosen. Too often these instructions are neglected. It pays in many ways to understand and follow them.

It is not too early to be arranging to make the windows, at least on the exposed sides of the house, tight for the winter. Metal weather strips offer the simplest, cheapest, and most effective means of making windows proof against wind, rain, and snow at all seasons of the year. There is no troublesome putting on and taking off as in the case of storm windows. If the latter are preferred, ventilation must be provided for in every room. The best scheme is to use special storm window hardware consisting of two hangers at the top and fasteners at the bottom permitting the sash to swing outward a short distance or draw in tightly. Either weather strips or storm windows will more than pay for themselves after a few years in reduced coal bills.

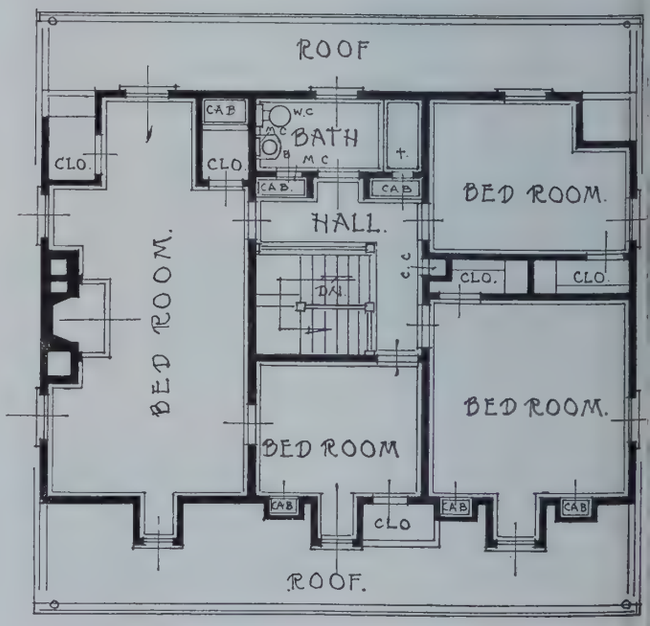
Home of Mr. Carl L. Hamilton

at Saint Paul, Minnesota

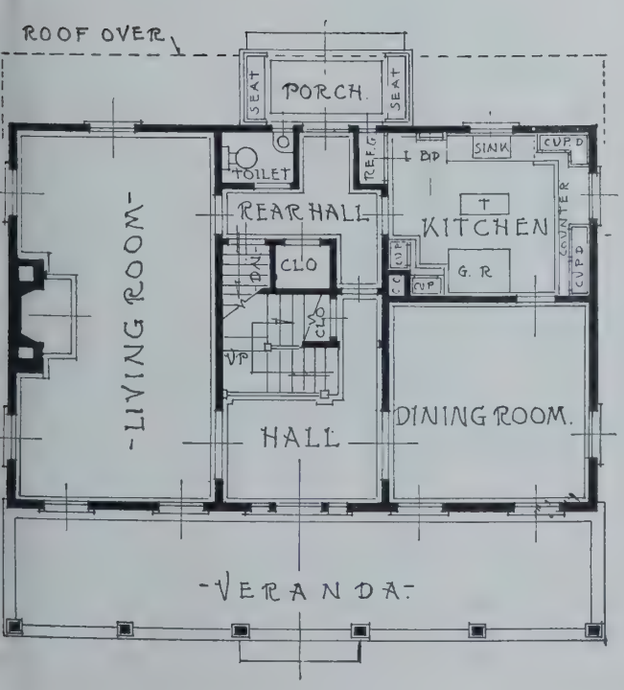
Russell F. Whitehead & John H. Wheeler
Associated Architects

Photographs by Buckbee-Mears Co.

That "the kitchen is the heart of the home" still remains true though it has for the most part shed the friendly equipment of earlier days—geraniums, wood ranges, and rockers —and taken on a new and shinier garb. Less lived in but none the less indispensable, the kitchen continues a sort of dictator of family fortune, for the best ally of success is health, and health, of course, depends primarily on clean food cleanly cooked



Just because a house is small is no reason why it need lack character and dignity, both so happily exemplified in this Minnesota home of Dutch Colonial design by Messrs. Whitehead and Wheeler. Small houses, like small gardens, must be carefully thought over—mistakes are so apparant and sometimes irremediable—and the use of imagination lifts them from mediocrity to distinction



It is the finishing touches, the little final conveniences that lend a house livableness and these two settles with their overhead shelter offer opportunity for outdoor enjoyment and a quiet view of the garden

Bird Renderings

by

Charles Emile Heil

Naturally no reproduction can completely hold the quality of the original but this Chickadee conveys much of the charm of the etching, which is about one-third larger

Every artist worthy of the name has an individual essence, so rare and so intangible that to translate it into words is an impossibility, to analyse it seems a species of cruelty for the man has left a bit of his soul prisoned and shining through the inevitably clumsy medium of such material things as canvas or paper, pencil and brush, or even the fine needle of the etcher. Yet we persist in attempting to reach the heart of the rainbow.

Perhaps the outstanding qualities of Mr. Heil's bird etchings are an extraordinary fidelity to detail, without any of the finicking aspect frequently following on strict faithfulness, and a great simplicity in composition and rendering—two apparently incompatible things and yet Mr. Heil has achieved their fusion.

Boston born and born loving birds, we suspect, Charles Emile Heil began as a boy to study and observe, gradually filling the gallery of an impressionable mind with intimate portraits of plant and animal life. At the Cowles Art School (Boston) and later in Paris, facility of expression was developed, until to-day Mr. Heil's work has won for itself a just appreciation and place. Awarded Gold Medal, Panama-Pacific Exposition; represented in the permanent collections of Worcester Art Museum, National Museum at Washington, New York Public Library etc.

Mr. Heil's birds are not types, they are understandingly portrayed individuals like this bright-eyed young Jay, alert and ready to move at the slightest provocation

INVITING THE BIRDS & WILD FLOWERS

MABEL OSGOOD WRIGHT

Director of Birdcraft Sanctuary, Fairfield, Connecticut. Author of "The Garden of a Commuter's Wife," "Flowers and Ferns In Their Haunts," "The Friendship of Nature," "Princess Flowerheart," and Other Books

Repeating Natural Conditions in a Garden for Feathered Friends and Flower Wildings—Furnishing Shelter from Their Enemies and an All-Year Food Supply

Photographs by
Mabel Osgood Wright & Wilbur F. Smith

MANY people ask, "Is it possible for me to have a bird sanctuary on a comparatively small bit of land, say an acre or less?" To these I would say that it depends what they mean by a sanctuary. Any spot where a few trees and shrubs supplemented by a pan of water and various seeds, in size from sunflower to fine chickfeed, will attract birds throughout the year.

But a couple of acres at least are necessary for a real sanctuary where summer residents will return year after year to nest and the shyer migrants spend their time in the between seasons until they all become a part of their surroundings and may be studied as natives and not visitors trying to adapt themselves.

The next "must be," to use Tommy Anne's term for a finality, is a cat-proof fence. Nothing is so foolish as to tempt birds to congregate without shutting out their night and day enemies. After this detail is arranged, then either adapt or imitate nature according to what you have to work upon. Do not clear up underbrush, except to remove too plentiful briars, leave the old matted leaves of other years, beneath them lies food for the Fox Sparrows, Towhees, and Thrushes. Have a moderate amount of high shade with shrubby growth beneath, a bit of bare earth for scratching and sun baths. Then through the whole, winding gracefully, let there be a three foot open trail, from which the birds may dart into cover, for they are cautious about becoming tangled in too thick brush without exits. Water, a small pond with sloping edges, if possible, or perchance a running brook, but if these are not available, an irregular basin made by hollowing out the soil, filling it a foot with cobbles topped with smooth gray cement. Edge this by irregular rocks between which Ferns may be planted and one or two shrubs or small trees like the Flowering Dogwood, in which the birds may perch and plume when coming from the bath.

IN MAKING a flower garden for oneself, the human point of view comes first for consideration, that is plus the bit of ground. If the ground is attached to a house not altogether to your liking, but one in which you must live, then these inevitables share the responsibility, but an extra keenness must edge your wits and a far broader vision pass before you in order for your dream to come true.

If, however, you wish to make, or rather I should say develop, a garden for birds you must turn about and get their viewpoint. This garden or sanctuary of which I would speak is not the very usual and generally conventional arrangement of a pretty bath of masonry set amid flowering shrubs on a smooth lawn, a feeding shelf conveniently near and a few nesting boxes attractively placed where the owner of the garden thinks that they look well. These accessories will attract birds and add the element of life to a garden but it is as unreal a condition from the birds' point of view, and as little normal as hotel life for the human is apart from the life of a normal home.

The bird sanctuary of which I write is not now theoretical but an actual fact, having been acquired ten years ago. (Here let me explain that "sanctuary" is now the generally accepted term for a refuge for birds other than game birds—song bird sanctuary, game bird preserve.)

In 1914, when Percy Mackaye had dramatized the recently awakened importance of the human and esthetic value of the live bird as against the decorative and barbaric use of the dead bird as feathers, the joy of the making of a sanctuary here at Fairfield came to me most unexpectedly. Location, land, general plan and details were mine to choose, and therefore the responsibility would be mine also. Happiness: for a bit of responsibility is the best of ballast in sailing a new craft!

I vowed secrecy, absolute secrecy in my search for the land. Only the Commuter, myself and my familiar spirit (the better part of me that comes to the rescue and argues pleas-

antly when my first judgment, as often happens, is too impulsive) were allowed to discuss the matter even behind closed doors. Rumors always raise the price of wild land even on the most abandoned farms. The Commuter suggested a lovely bit of woodland topping a rocky hill, below which ran a rather swift stream, an ideal picnic ground, with little underbrush and deep shade—a stretch of almost one hundred acres. "A cat-proof fence to enclose that land will discourage one patron saint (Sanctuary Anne we call her between ourselves) before we really begin," I said. "Do you think this fencing necessary?" Evan demurred. "Absolutely; as well might a tray of diamonds be left unprotected in the middle of Broadway, as to develop a popular year-round haunt for birds, and leave it to the cats." "That cuts out the wild woods. What next?"

"The ten acre 'calf pasture' across the way; it is both near enough and far enough. It is too uneven to be priced as building lots, too bare of soil to raise any market crops; it is threaded up hill and down dale by the track of the many calves and colts that have grown up there. Beside it is overrun with Blackberries, Elders, Bird-cherries, Mohawk Briars and Sumachs—bird food galore, all bird sown, showing that the birds themselves have chosen the spot and all we have to do is to follow the leaders and develop what nature has selected."

You who are thinking, or even dreaming of making a bird refuge, do not consider anything but wild untilled land, where leaves have fallen year on year and gone to decay and dead wood been left where it fell. Where wild flowers and ferns have begun to embroider the edges of open spaces and the scratching is good for the early arrived Fox Sparrow, the Towhee and all the Thrushes. Do not try to take a bit of land once tilled and by mere artistry of design plant a sanctuary, for the best of landscape architects cannot give the place the touch of ancestry that comes from the primeval. Yet do not, on the other hand, make the mistake of trying to turn a forest into a sanctuary. There are few birds or flowers in the deep woods. Try to make a list of them and you will know.

We did the buying from New York, by 'phone, and were not a little amused by the gossip that reached us on our next country trip. An unknown buyer had found signs of gold in the many weathered rocks, bungalows for a colony of fresh air children were to be erected, and the growing of Blueberries in a boggy swale were all suggested. Strange and most unusual but all these rumors proved in a twisted sense true!

The place has proved a gold mine of satisfaction, for both its maker and the community. Great bird-sown bushes of the valuable High-bush Blueberry, revelling in the swale of deep acid soil now freed from choking brush, flourish apace and not only are there tree bungalows for all the species of winged fresh air children whose tree-hole family traditions allow them to use houses, but in the outside court between the rough stone gate and the fenced sanctuary stand the Warden's Bungalow and a long low Cottage Museum. Here the local birds that may be seen at some time of the year in the state* are set against picture backgrounds so that people young and old, who have not the patience or time to name the birds afield, may have their first introduction and establish a bowing acquaintance at close range.

Thus did the dreams come true one by one, that were at first but vague outlines born of the needs of the feathered folk blended with the human needs to which the development was to minister. But this is going ahead of the story, to the foot of the rainbow.

When the real purpose of the purchase of the calf pasture was known, many rejoiced but "some doubted" the wisdom of our choice of the land. A bird sanctuary should be in the woods, or at least in a grove, they said. Birds always nest in trees and there were not more than two dozen large and, to them, capable trees, in the ten acres. If one did not know bird life this criticism seemed true. The critics did not know, but they thought they did, and, being folk of fixed ideas, it was the same thing.

That first summer the census of old trees ran as follows: four splendid Oaks, two giant Pepperidges, three Tulip-trees, half a dozen Maples of different species, red Cedars, the picturesque remains of an old Apple orchard, a dozen trees of the Black Bird-cherry, and the ghosts of half a dozen great Chestnuts that stretched bare arms to the sky, as if in protest that, at least in Connecticut, their tribe is doomed to extinction.

"Of course, you will cut down those dead trees at once," said the critics.

"Not at all, they are a valuable asset for perches," we replied.

Almost all birds, especially in their migrations, seek an unobstructed point of

Autumn of the first year in Birdcraft Sanctuary; the east side of the land as it stood when purchased in 1914

Robin bathing in the irregular basin of natural stones in the sanctuary at Fairfield, Conn., planted with ferns and shrubs in which the birds may perch and plume after their dip

*Birdcraft Sanctuary when completed became the property of the Audubon Society of the State of Connecticut and is now the headquarters of its educational activities.

vantage from which to see the land. These old Chestnuts proved veritable watch-towers and at the end of ten years, though somewhat less articulate in outline, hold their own.

By September the cat-proof fence was in place and painted a deep green so that it might merge in the landscape and not have the appearance of "enclosing a prison yard" as someone kindly suggested. The cattle paths had been modified and adapted to human needs, circling some of the groups of trees, then running straight here and there to give vistas and perspective. The boggy swale was deepened and made a really natural pond, thanks to several fine springs that were disclosed when the hundreds of yards of rich peaty soil was removed for use in the bit of grading that was done about the buildings only; for nowhere else was the natural undergrowth disturbed. The only formal touch about the pond was a bit of a spillway to guide and control the outlet of the water in flood time. A bare hill that ran up to the grounds of the High School, making a too abrupt ending to the wildness, was planted (August having been mercifully wet) with 200 Spruces, White and Austrian Pines, and Hemlocks, and the stakes set for the late fall planting of some groups of Lombardy Poplars to break the monotony of the conifers.

AN ALL YEAR ROUND FOOD SUPPLY

Elder bushes on pond edge showing a source of summer food supply and flower beauty and below a Christmas sheaf being enjoyed by Tree Sparrows and Juncos within the security of a cat-proof fence. (Both pictures taken in Birdcraft Sanctuary)

"It will take a generation before those trees will hide the school," croaked the crepe-hanger.

Now in the tenth year, the hill is not only well wooded and the school buildings hidden but the Poplars are 50 feet high and many of the Pines measure from 30 to 40 feet.

Already considerable cutting out has had to be done, and this side of the sanctuary where a broad closely cut grass path sweeps about the trees, has a bit of what might be called parked effect that acts as an admirable contrast to the absolutely wild and blends it graciously with the "must be" necessities of civilization.

IF THIS were a bird paper, I would dwell upon the species and doings of the settler and migrant, that have long since planted the place with fruits and berries by their digestive processes, quickly appreciating the protection and regular supplements of chick-feed and winter suet to their rations. As it is a "garden" magazine I will pass to the natural flower planting and its supplementing, merely remarking that before the gates were put in place and a general cat *battue* took place before the final enclosing, we wondered how so many birds had managed to survive long enough to do the planting. Ye gods! It seemed to rain cats! Not only domestic cats that probably being homeless had relapsed to savagery, some living and breeding among the decayed logs that were scattered about, but it was seemingly the ballroom of all the nice, domestic neighborhood cats that stole out between twilight and dawn and held a sort of witch Sabbath, the cats that according to their owners "never leave home"!

Even that first summer, in spite of the temporary destruction of the herbage by carting and other work there was a satisfying color scheme foreshadowed. The cattle had kept the softer growth closely cropped but by the third year there had sprung up a wild flower garden, a rival in interest to the birds.

"We didn't know birds required flowers to feed on," said the critics, now very few in number and somewhat querulous and hesitant.

"No flowers, no fruit! In Birdcraft Sanctuary the berries do not come canned!" snapped the Commuter being somewhat irritated by Poison-ivy, several large fruiting vines of which we had left in remote places as a special delicacy for the Myrtle Warbler. Thus nature as usual took the lead and we had only to follow and supplement.

As birds at all seasons had made the calf pasture their wayside inn so it was sown with many foods in their season and this natural planting should be a guide to all such places that are larger than a mere garden annex.

There are the bird-sown berries that required only a bit of rearranging and freeing in due course from the strangling clutches of two species of Mohawk briar, in itself no little task. Native Barberry with terminal fruitage, preferred by birds to Thunberg's as the latter, though heavily fruited, has a thorn to each pair of berries so that the birds must wait until the berries fall and pick them from the ground beneath. White-flowered Elder with black berries ripe in August, Juneberry, Nannieberry, Shadbush, Highbush Blueberry, Whortleberry, Winterberry, Bird-cherry, Chokeberry, Maple-leaved Cornel, three species of Dogwood beside Cornus florida whose berries are a special feast for the migrant Thrushes of autumn. Wild Grapes of two species and Mountain Cranberry, the berries of these last two being eaten in early spring when well mellowed by frost. Staghorn and Smooth Sumach, wild Blackberries high and low bush, Strawberries, and Black Raspberries, Bayberry, Partridgeberry, Baneberry and Sassafras. Ungrafted Apples, beloved by Jays, Purple Finches and Grosbeaks in late fall; and, to crown all, in September the oval purple berries blending with the scarlet leaves of the great Pepperidge trees.

These all are worthy fruits, many preceded by things of beauty in their flowering. Meanwhile the flower color with and without promise of fruitage for birds gives equally valuable food to the eye. All the Compositae have eatable seeds and at all times birds may be seen clinging to the Sunflowers, Thistles, Asters, and the like.

Aside from use, flower beauty has made its appeal and now another branch of the sanctuary is being gradually developed to save our vanishing wildflowers, at least in part, as we would save the birds.

In these ten years high shade has grown up and the various degrees of soil—neutral, alkaline, and acid—been fitted to the various flower needs. The easily obtained common plants are being supplemented by those more shy and easily discouraged and rooted out. About or in the pond of irregular and natural outline, according to season you will find Pickerelweed, Arrowhead, Jewelweed, White Pond-lilies, Arums, Jack-in-the-Pulpit, Great Rose Mallow, Cattail, Azalea viscosa, Dodder, Marsh Marigold, Cardinal Flower, Closed Gentian, Of Ferns the three Osmundas and the stately Ostrich Fern. The Scarlet Columbine is everywhere that a rocky bank gives shelter and seems to fairly trickle downhill. Opuntia, our yellow Cactus, is found in two places and three Roses—Sweetbriar, the dwarf Pasture Rose, and the Swamp Rose yield first fragrant blossoms and then scarlet haws.

Two spots we are developing with eager hope, one in a picturesque damp spot leading to the pond, the other under the Oaks on a loamy hill. In the first the Large Yellow and Showy Moccasin flowers gleam among low Ferns, a step nearer water than Bloodroots and Trilliums. On the hillside the Pink Moccasin flower, well established, is stepping daintily about its dry leafmold earth and Maidenhair Ferns dance shadowy steps with them. Now we are bordering a trail with the right soil to home all the local Ferns obtainable, some thirty-five species all told. The Walking Fern, Cliffbrake, and a few others needing alkali soil, while the vanishing Climbing or Hartford Fern must be lodged between Blueberry bushes in low shade and such sour soil that not even the wind from the haunt of the Walking Fern may pass over it.

Ah friends! It is an endless chain, this following nature and that is the hope of it, for it is a simple object lesson in the eternity of life and effort. Make a sanctuary for flowers and birds as near the heart of your community as may be, the peace of it will overflow and spread like a vitalizing watercourse—only don't forget to begin with the catproof fence! The birds need it and the wild flowers need it, so see that it is climbproof also.

[The informal planting of Lemon Lilies in Mrs. Wright's old garden at Fairfield which appeared on page 368 of the July issue was from a photograph by Mr. Horatio Hendrickson and, we regret, erroneously attributed to another source.—ED.]

The Housewife & Her Home Garden

Some Delectable Vegetable Recipes from Mrs. Ida C. Bailey Allen's Recently Published Book on "Cooking-Menus-Service"*

*Copyright, 1924, Doubleday, Page & Co.

Eggplant au Gratin

1 medium-sized eggplant
3 tablespoonfuls bacon fat
2 tablespoonfuls butter
2 tablespoonfuls flour
½ cupful stewed sifted tomato
1 cupful stock or 1 cupful water and 1 teaspoonful vegetable extract
½ teaspoonful salt
⅛ teaspoonful pepper
1 cupful grated cheese
2 tablespoonfuls buttered crumbs

Peel the eggplant and cut into large dice. Dust with flour and sauté in the bacon fat until golden brown. Make a sauce by blending the butter and flour, adding the sifted tomato, stock, and seasonings. Fill a baking dish with alternate layers of eggplant, sauce, and cheese. Sprinkle with the buttered crumbs and bake twenty minutes in a moderately hot oven 350–375 degrees F.

Vegetable Sausages

3 medium-sized carrots
2 medium-sized parsnips
4 medium-sized onions
1 cupful cooked dried peas
½ tablespoonful parsley
1 clove garlic, minced
½ teaspoonful kitchen bouquet
2 cupfuls fine dry bread crumbs
2 eggs
Salt and pepper to taste

Boil and mash the vegetables, add remaining ingredients; when cold roll into sausage shapes, egg and crumb, and fry until golden brown in deep fat hot enough to brown a bit of bread in forty counts—375 degrees F.

Tomato Soufflé

1½ cupfuls stewed tomato
3 tablespoonfuls butter or margarine
4 tablespoonfuls white or entire-wheat flour
1½ teaspoonful salt
⅛ teaspoonful pepper
4 eggs

Melt the butter, blend in the flour and seasonings, add the stewed tomato, and cook three minutes after boiling point is reached, stirring continuously. Beat the egg yolks until thick, add to the tomato mixture, then fold in the whites of the eggs beaten stiff. Turn into a well-oiled baking dish and bake in a moderate oven—350–375 degrees F.—about three quarters of an hour.

The soufflé may also be prepared in individual ramekins, in which case twenty to twenty-five minutes' cooking will be sufficient.

Potato Omelets

3 cupfuls mashed potato
½ cupful hot milk
1 or 2 eggs
½ teaspoonful salt
⅛ teaspoonful pepper

Beat the ingredients together; if the mashed potato is cold, add a little warm milk; the mixture should be as thick as hot mush. Drop by tablespoonfuls on to an oiled griddle; when browned on one side turn and brown on the other; fold like miniature omelets, and serve with broiled chops, chicken fricassee, broiled or fried steak, or as the main dish at supper or luncheon with a garnish of bacon.

Stuffed Sweet Potatoes

6 medium-sized sweet potatoes
1 cupful minced ham or tongue or ½ cupful chopped nuts or cooked diced bacon
1 teaspoonful minced parsley
½ teaspoonful salt
⅛ teaspoonful paprika
Top milk or cream, if necessary

Bake the sweet potatoes in a moderate oven—about 350 degrees F.—until tender. Cut a thin slice lengthwise from each and scoop out the pulp. Mash this and add the ham, tongue, nuts, or bacon, the parsley, salt, and paprika and, if necessary, moisten slightly with a little top milk or cream. Return to the potato shells and bake long enough to heat through thoroughly and slightly brown on top in a moderately hot oven—350–375 degrees F.

EARLY SPANISH WALNUT FURNITURE

Showing traces of the Moorish influence which still persists in the arts of Spain today (see text on page 113). The wall-hanging is a 17th Century damask bedspread and the table stands on a peasant rug, also of Spanish make

PERIOD FURNITURE & ITS USE

AMY RICHARDS COLTON

Decorator

Photographs by courtesy of Metropolitan Museum of Art, Kensington Mfg. Co., Richter Furniture Co., Jacques Bodart, Inc.

Forerunners of the "English Army Chair" Found in Tombs of Ancient Egypt —Nineteenth Century Phyfe Furniture Dating Back to the Early Greek

EDITORS' NOTE: Articles on Wall-paper, Chintzes, Pottery, etc., will be found in the September, May, and previous issues done with Mrs. Colton's customary acumen which takes the reader at once past the shoals of mere persiflage straight to the heart of things. Mrs. Colton does not waste words or attempt to divert the attention by non-essentials but covers the rather large themes in an illuminating, straightforward way placing at our immediate disposal the gist of many years' sympathetic study and use of things with which most folk have but scant acquaintance and of which they are glad to learn more.

IN THE remote past period furniture did not exist in the self-conscious way it now does; on the other hand, in very early times, all furniture and interiors more closely resembled each other, because the slowness of travel and difficulties of communication obliged people to employ local artists and craftsmen in furnishing their houses. Unconsciously the result was more homogeneous or what we now call "in a period."

The earliest records of furniture and interiors come from the more highly civilized Oriental countries: China, India, Syria, and Egypt. The life of all Oriental peoples was so different from our own, that interiors and furniture, as we understand them, are more nearly the lineal descendants of the northerly European countries; but in studying the subject historically, one constantly realizes the enormous debt we also owe to the Orient—

to Egypt in particular—for the structural lines of much of our furniture.

Because of the dry climate, there has been enough furniture preserved to us in the Egyptian tombs to form an accurate idea of the details of construction of most of the pieces, as well as the materials they were made of. Many of them are now on exhibition in museums in Egypt, Europe, or the United States, among them wooden tables, stools, chairs, and beds. The seats of the chairs are rushed in patterns, or covered with skins attached by thongs. The heavier furniture is dowelled and mortised together on the same principles we now use. Besides the wooden furniture there were heavier pieces of stone for more ceremonial purposes. The wooden furniture that has survived is mostly of the 14th and 15th Centuries B. C., and that of stone about one thousand years earlier.

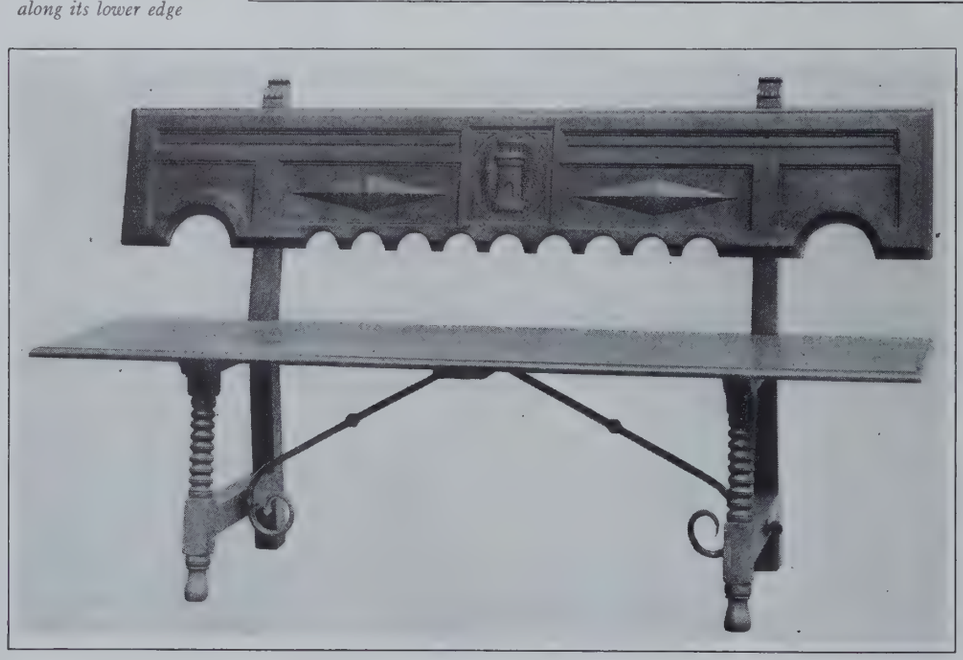
A CHARACTERISTIC feature of Egyptian furniture is the almost naturalistic animal leg used especially for couches and beds. The earliest form was the Ox leg and hoof, and later that of the lion. All our turned and hoofed legs of furniture, and those with cabriole legs terminating in a claw effect are the direct descendants of these ancient Egyptian forms. As time has gone on they have become more conventionalized. The feet, instead of pointing straight ahead as in the Egyptian pieces, point out diagonally and are usually omitted on the back legs. The Egyptians symbolized the whole animal by using four legs, the feet pointing in the way they would in nature.

Other familiar forms in furniture that have descended to us from Egyptian times are their folding chairs, stools, and beds. The construction of these is identical with our own camp furniture, the so-called English Army chair, and one variety of folding cot bed which has a joint in the middle. A table in the Metropolitan Museum is identical in form and

French Regence arm-chair in walnut with seat and back of needle-point; a period (1715-23 A. D.) of somewhat massive and formal magnificence

Spanish walnut bench of characteristic design, early 17th Century, the back support showing an amusing suggestion of little Moorish arches along its lower edge

Ancient Egyptian table and folding chair from which the refectory tables of the Middle Ages and the so-called English army chairs have been developed



construction on a smaller scale with one of the simplest forms of English refectory table, which we have revived. The Egyptian furniture as we see it now is nearly all of plain wood, but we know from descriptions and traces of color on some of the pieces that they were polychrome originally, with touches of gilding on a gesso base. This method was adopted by the Greeks, who handed it on to the Romans, they to the Italians, and so on to our time.

From bas-reliefs, mosaics, tiles, and descriptions it is evident that similar shapes of wooden furniture to those in Egypt were in use in the near-eastern countries in the earliest civilized days, but no actual pieces have survived to tell the tale. We know that the Assyrians, as well as Egyptians, had a form of chair very like the later X or Savonarola chair of Italy, and several other shapes that we still use in chairs and day beds, but

ill actual furniture has long ago passed into lust.

THE first great European civilization that has left a constant reminder with us and s responsible for all our so-called classic archi- ecture was that of Greece. The Greek orders of architecture are too familiar to need de- cribing. They were afterwards grafted on to Roman civilization, and there became elab- rated, over-ornate, and finally decadent, hough still preserving the germ that blos- omed again in the architecture and furniture of the Italian renaissance. Though so much Greek architecture and sculpture remains, few ragments of furniture have survived, and we most of it was dedicated to their highly humanized gods. When Greek civilization began to decline and finally merged into the Roman, a more materialistic use of art came about in the form of great public buildings and villas for the rich nobles. These villas were the ancestors of our own country estates, and were places of refuge from cares of state and military campaigns. They combined with beautiful gardens, all the interior comforts, objects of art, and furniture that were known at that time.

MANY pieces of Roman furniture remain, because of the extensive use of marble and bronze. There were undoubtedly wooden pieces also; but all have perished. Marble tables elaborately carved, with both pedestal and animal legs, were the direct ancestors of the familar wooden tables of the Italian Renaissance. There were heavy monumental-looking marble couches, fitted with velvet cushions, bronze tripod pedestal and oblong tables, with marble tops. Some had tops which were extensively used later by the French in their 18th Century lighter pieces.

It is surprising how few entirely original contributions have been made in the forms of furniture since the Egyptian, Greek, and Roman times. As the refinements and complications of life increased, the existing forms were merely elaborated and more kinds of furniture devised from the same structural lines. The Orientals, Greeks, and Romans for everyday living reclined more than they sat, which accounts for the formality and angularity of most of their chairs, these being chiefly intended for affairs of state and public ceremonials. Nevertheless, they used loose cushions, stuffed with feathers and tied to the seats and backs of chairs, and covered with beautiful woven materials. Our present-day popular use of loose cushions, attached to couches and chairs, links us in a flash with the comfort-loving Egyptian of thirty-five hundred years ago.

AFTER the Roman civilization declined, the next link we have in the way of furnishings and furniture is the Byzantine period. Through Venice this influence flowed into Europe. It still reigns in that city and neighboring ones. It spread extensively into northern Europe; but the only evidences surviving in the way of furniture are a few church pieces and one or two throne chairs. Traces of Byzantine designs remain in the carvings of early chests, and the rounded Romanesque arches were carved on furniture down to the English Jacobean times.

Another junction between Europe and the Orient was the Moorish conquest and occupation of Spain, which lasted seven hundred years. It left an impression on the architecture, art, and furniture of Spain that exists to this day. The Moorish influence shows a richness of color, intricacy of pattern, combined with entirely conventional motifs. As

ENGLISH OAK FURNITURE OF 17TH CENTURY JACOBEAN DESIGN

In England, after the Elizabethan era, there succeeded the Jacobean (A. D. 1603-25) with its wealth of turned legs, incised carvings, etc., all the wood being oak *(see text on page 115)*

iefly know about it from bas-reliefs and the ecorated vases and amphorae. The furniture rms were similar to the Egyptian, but more rves were introduced, especially in the backs nd legs of chairs. The French Empire chairs nd those of our own Phyfe are modelled from ese early Greek pieces. Colored surface ecoration was used and the furniture was nstructed of wood, marble, and bronze. f the latter many tripod stands and lamps ave survived.

Greeks as well as Egyptians were lovers of rong color and originally their furniture, uildings, and sculpture were highly colored. lany of us think of white marble as charac- ristic of this race, but it is time alone which as given us the idea. The Greek ideals of t were simplicity and purity of form, and

WALNUT FURNITURE OF THE ITALIAN RENAISSANCE

The Renaissance had its birth and greatest glory in Italy, and lingered longest there; but the general characteristics of its furniture were very much the same throughout Europe except for the materials which were for the most part indigenous to each country

the Mohammedan races were forbidden to use animal or vegetable forms in their art, they had to make up in color and elaborateness of ornamentation what they lacked in variety of motif, but the result is a monotony and over-elaboration that one tires of.

THE next great period was the Gothic, and this, like the highest period of Greek art, was inspired by religion. As Christianity grew in power and wealth, it expended untold riches and talent in the building of churches and cathedrals, which reached their greatest perfection and beauty in France. All this was contemporaneous with the Middle Ages, and at this time, except in Italy and Spain, there was little attention paid to domestic interiors or furniture. In northern Europe no middle class had yet arisen, and the feudal age reigned supreme. What home-making possessions there were belonged to the upper classes—huge chests, refectory tables, benches, crude chairs, beds, and tapestries. These could be taken apart and carried from place to place, as constant wars made life rather a nomadic one. In addition to the European wars there were the Crusades. Survivors from these brought back tales and trophies of the East, and again a link with the Orient was established.

Had it not been for the church, little Gothic furniture would have survived, but thanks to its priests, monks, and rich prelates, many fine chests, chairs, benches, and tables were sheltered from the turbulent life outside the cathedral or monastery walls. These later were discovered and kept as relics of the Middle Ages. Carved choir stalls still stand in the cathedrals, but some have been removed and come by chance into secular life. We see them modified in some of our would-be "primitive" tea rooms, where we try to give and receive "atmosphere" by sitting on hard, straight-backed community seats, partially divided from each other in the manner of the old choir stalls.

In southern Europe more domestic furniture of this Gothic period has survived, as settled life began earlier there than in the north and the climate was kinder. All northern Gothic furniture was made of oak or stone, the general outlines being rigid and rectangular. Its chief beauty was the fine carving, with its wealth of motifs. This gave an opportunity for each carver to let his imagination loose on the particular task in hand. In southern Europe, furniture of this period was made of walnut or marble, the wooden church pieces sometimes being covered with gesso and finished in gold and polychrome.

GRADUALLY the Gothic period passed and with it the feudal age. A middle class sprang up and asserted itself. Rich merchants, as well as rich nobles, became patrons of art. The whole of Europe grew less turbulent, more settled, and trade instead of robbery became a common occupation.

For the first time since the heyday of the Roman Empire, interiors of beauty and luxury became everyday occurrences. The money that was formerly dedicated to the church and to the building of great cathedrals was used to build and furnish luxurious town and country houses, from the palaces of kings to the houses of the rich merchants.

The earlier Renaissance was still a period of great inspiration, and some spiritual feeling from the Gothic age lingered; but in the end luxury ran riot and the standard became one of perfect technique and elaboration of detail in every article of use on which art could be lavished, instead of the restraint and real creative impulse that characterized the earlier Renaissance.

Previous to the Renaissance nearly all furniture belonged to kings, emperors, rich nobles, and the church. No middle class existed and the lower orders, being merely vassals, had no belongings of their own. With the Renaissance and the growth of the rich merchant class, they also became patrons of art and owners of household gods, and the numbers and variety of pieces of furniture increased very rapidly.

The Renaissance had its birth and greatest glory in Italy, and lingered longest there; but the general characteristics of its furniture were very much the same throughout Europe, except for the materials it was made from, which were as a rule indigenous to each country. Like that of ancient Rome, it was characterized by its large scale, formality, general magnificence and elaboration of ornament. There was at first some restraint, but as time went on the skill and invention of the designers ran away with their judgments, and all furniture became over-loaded with ornament and, in the end, rather vulgar. The most beautiful furniture was of marble, carved walnut, and carved wood gilded and touched with polychrome. Marble was also used for the tops of tables with polychrome bases and the framework of chairs was sometimes of bronze, notably the Savonarola chairs of the X model. These had flexible backs and seats of velvet or leather tied on with heavy tassels

Many of the wooden chairs also had these lexible seats and backs, but otherwise everyhing was angular, stiff, and lacking in all omfort, as we regard it.

Spanish furniture of the Renaissance reembled greatly the Italian, its especial haracteristics being a greater use of gold and olychrome, clumsier shapes, less fineness of letail, and also the Moorish influence. Ironvork reached a high state of perfection in pain and its use in the stretchers of the ables was a national feature. The Moorish nfluence brought in a tremendous use of olored tiles, and they were set in every naginable way. No Spanish interior was omplete without them. All the wooden rniture was made of walnut as in Italy.

In England the furniture of the Renaissance as known as Tudor, and was contemporaeous with the reigns of Henry VIII and Elizaeth. It was of oak and characterized by eavy bulbous legs, too ornate carving, and a enerally clumsy and over-loaded look that reated somewhat the same impression as the uffy, over-elaborate Tudor costumes. Durng the reign of Henry VIII many Italian rtists and artisans were brought from Italy, nd they left permanent traces of Italian art n that cruder northern country.

In France the reign of Francis I represented ne best period of Renaissance art. Francis mself was a great art patron and the finest rniture of the period was made under his spices. It was less crude and clumsy than the nglish, and not so monumental as the Italian. he influence of Italy was felt, however, for rancis I as well as Henry VIII imported alian artists and craftsmen from Italy, and e also had an Italian wife, Marie de Medici. During the Renaissance period, tapestry gan to be used in covering chairs and this stom kept on through the 17th and 18th enturies.

BY THE 17th Century, the Renaissance faded in northern Europe and merged to the various periods that intervened beween the reigns of Elizabeth in England, Francis I in France, and the great 18th Century periods in England and France. Although Italy and Spain shared the lightening effects of the classic revival in the 18th Century, they never quite lost traces of the heavier period of the Renaissance. In these hotter climates, where the ceilings have always remained high, the stately Renaissance style seems to be more in keeping.

In England, after the Elizabethan era, there succeeded the so-called Jacobean, with its wealth of turned legs, incised carving, and cane backs and seats in the later more luxurious chairs; but all the wood was oak. It was practically the only wood used in English furniture, except ebony for inlaying some of the late Jacobean pieces, until the Dutch introduced walnut in the reigns of William and Mary and Queen Anne. Walnut then became the fashionable wood, and oak retired to the provinces, where it flourished obscurely for many more years.

The fine William and Mary and Queen Anne furniture was usually veneered, which showed the beautiful patterns in the wood. During the same period lacquer furniture was introduced from China, through the activities of the East India trading companies. Cabinets were the first lacquer pieces introduced, and they were usually mounted on gilt stands made for them by European cabinet makers. Soon the English and Dutch makers acquired the art of lacquer, and as the rage for it increased, much was turned out, of home manufacture, to fill the increasing demand. Chinese pieces were still imported but no longer had the monopoly.

WITH the accession of Louis XIV in France, came the classic revival in architecture and the arts, and this became pretty general throughout Europe, although France led all the other nations in the three periods of Louis XIV, Louis XV, and Louis XVI.

The classic revival in England occurred during the reigns of the three first Georges, and took its general name of Georgian from them. The three great French 18th Century periods, and also those of the Georges are so well known that only the briefest descriptions, in addition to photographs, are necessary.

Louis XIV furniture was characterized by the cabriole leg, a somewhat massive and formal magnificence, liberal use of gilt ornament, either on walnut or on furniture already gilded. Large patterns and strong colors prevailed in the rich damasks or tapestries used in covering the furniture. The Louis XV period still maintained the cabriole leg, but the general scale of the furniture was smaller, the ornament less balanced, materials more informal and lighter in color. The Chinese influence was introduced most fantastically, and the style, at its most debased period, ran riot in the variety of its made conceits. The pendulum then swung back, during the reign of Louis XVI, and you again have straight legs to the furniture, much restraint in design, and far severer feeling in everything, as well as a smaller scale. The materials also are daintier and paler in color.

During the Georges no furniture was quite as gorgeous as that of Louis XIV or Louis XV at its height; but the Chippendale furniture did borrow many ideas from France and was far heavier than the later periods of Heppelwhite and Sheraton. The Adam furniture borrowed more directly from the classic revival in Italy. Then came the French Revolution, and after that the next important periods were those of the Directoire and French Empire, which though rather short in duration, had a somewhat wide influence. Echoes of both spread into this country, as well as England. All our early 19th Century mahogany furniture was influenced by the French Empire period, though the gilt ornaments that were so characteristic in France were often omitted. The great American cabinet maker Phyfe was influenced by this period. When all the manifestations of the Empire had had their day, one might say the deluge came in the shape of the long Victorian Age, from which we have been rescuing ourselves ever since the eighteen-nineties.

[The Use of Period Furniture in the Modern American Home will follow in November]

PERPETUATING OUR BIRD POPULATION

QUITE apart from the joy they bring to gardens, birds serve a utilitarian purse and are in an extraordinary degree the ends of man. A recent report of the Ohio gricultural Experiment Station presents me illuminating tabulations of their actiies in the insect world and the world of stiferous weeds. Our cheery friend, the obin, for instance. has the following fine cord to his credit, notwithstanding the fact at we sometimes hear his fruit-snatching oclivities bitterly complained of:

"Of the food of the Robin 42 percent. is animal tter, chiefly insects, and 58 percent. is small its and berries. Of the 58 percent. vegetable d, 47 consists of wild varieties of fruit. In June and July, the percent. of cultivated fruit rises to 25. In August, grasshoppers constitute over 30 percent."

The food of all the different Thrushes is similar and insects make up over 70 percent. of the summer diet of the Wood Thrush, which may be taken as representative of the group. The Chicadee often devours more than 450 eggs of plant lice in a single day. It also eats at least 20 cankerworms per day during the activity of these insects, or the equivalent of 5,550 eggs, which this number of moths would lay during the season.

These are not exceptional but typical cases. Looked at even from the purely economic standpoint, few birds are destructive and many very valuable—knowing this, and remembering their beauty and their song, can we afford to neglect these industrious little folk?

A BIG BOX PLANT ON THE DRAG

The ball measures 22 inches thick and 6 feet in diameter, the minimum amount for a shrub of this size and age. From 2 to 3 feet of the top of this plant is to be pruned off. The cost of transplanting shrubs like this is from $8.00 to $10.00 each

MOVING LARGE SHRUBS

CARL STANTON

Landscape Architect

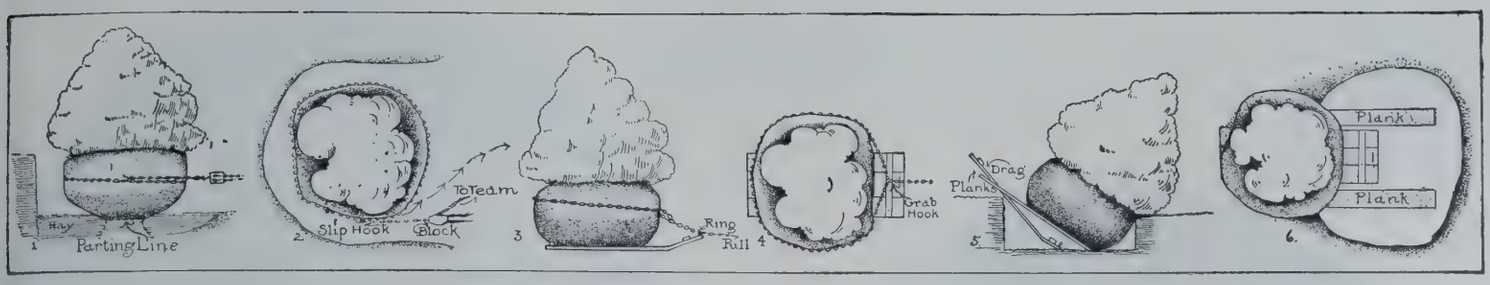
TRANSPLANTING very large shrubs often becomes a necessity either as a means of obtaining immediate effects or to avoid overcrowding of material which, when small, was planted closely for the very purpose of giving quick results. Now, there is nothing difficult about such transplanting and results may be just as surely good as though small material were being moved despite the fact that local contractors and jobbing gardeners persist in casting a cloud of obscurity over the methods, bowing the victim down with tales of the numerous difficulties to be overcome and saying "that the job can be done, but it is worth at least fifty dollars each plant."

Large shrubs (that is, shrubs more than six or seven years old) will require considerable pruning to make up for a reduced root system if transplanted by ordinary methods, unless great care is taken to preserve a very large root ball while moving them. In light soils this is practically impossible, and winter moving with a frozen ball of earth must be resorted to. In heavy clay soils, however, the following method may be pursued whenever the soil is dry and stiff enough to hold together, especially if the clay root-ball is filled with a network of fibrous roots such as belong to Box plants or to Hemlocks.

FOR winter transplanting, work is begun in November or early December. Before tying in the straggling branches of the shrubs to be moved, it is well to look them over carefully and drive a stake close to the butt of each on the side that it seems best to have "to the front" in the new location (see next page). This makes it unnecessary to untie the lin to be sure that the shrub is faced prope when planting.

Trench around the shrub to be moved to depth of about two feet, leaving a ball of ea from 5 to 10 ft. in diameter, according to t size of the shrub. A Box plant or a specim evergreen 8 ft. tall and 6 to 8 ft. in diame will require a ball about 5 ft. across. Pla with fibrous roots can be handled w smaller balls than do those with coarser roo

The soil below the root ball is taken o except for about two feet under the cente thus leaving the plant with its root syst perched on a two-foot pivot. One half of e outside of the trench bank is sloped away o facilitate removing the shrub from the he A 6-inch covering of hay is placed in the v bottom of the trench to keep the root-ll



SHOWING SUCCESSIVE STEPS IN TRANSPLANTING

First trench around the shrub (Fig. 1) to a depth of about 2 feet, leaving ball of earth 5-10 feet in diameter according to size of plant; take out soil below, leaving 2 feet under the center, and cover bottom of trench with 6 inches of hay (as directed in text). Slip a chain around root ball (Figs. 2, 3, 4) and it can be readily shifted by a pair of horses (see preceding page) with the aid of block and fall. Figures 5 and 6 show method of lowering into new hole as described in text below

from freezing to the ground so firmly that it cannot be moved when the time comes.

The holes that are to receive the shrubs may be dug at this time, and the soil covered with hay, but it usually works out better if the ground is covered a foot deep with hay where the holes are to go, and the holes dug later, when the plants are moved.

EXCEPT for overhauling and collecting the necessary tools, and removing from the root balls any blanket of snow heavy enough to exclude the frost, nothing more is done until after the balls are thoroughly frozen. Several pieces of strong chain from 6 to 12 ft. in length, blocks and tackle of 1 in. rope, crowbars, two 5-ton lifting jacks, planks of assorted sizes, plenty of small pieces of board for blocking, and some pieces of burlap for use around tree trunks to which are attached the blocks for pulling, will be all the apparatus required.

For the moving, a crew of three men and a pair of horses, with perhaps two men to dig the new holes, will prove to be economically efficient.

To avoid overcrowding, where plants are only moved a few feet, the hole to receive them is connected with the trench around them so that they need only be drawn across, without lifting from the hole. If a chain be slipped around the root ball (see accompanying sketches) a pair of horses, with the aid of blocks and tackle, can easily move a very large shrub by a series of twisting pulls.

If the shrub is to be moved any distance it is jacked up on one side with two jacks, spaced so that a stone-drag may be slid between them and under the ball. The jacks are removed and, if the ball sits far enough onto the drag, a chain is fastened around it with one end slipped through the ring of the drag so that the pull of the team will come on the ball and not on the drag—thus preventing the latter from sliding out from under the ball. A twisting pull with the chain on the ball, while the drag is held stationary with crowbars will slide the ball further onto the drag if it seems desirable.

On arriving at the new hole, the drag is swung around end on to it, and two short pieces of plank are laid, one end of each on the bottom of the hole, and one beneath the ball—one plank each side of the drag, to receive the ball. A twisting pull with the blocks and tackle will turn the shrub so that the good side is toward the front, as it slips into the hole on the planks. These planks carry the ball clear across the hole instead of allowing one side to drop straight down so as to throw the plant on its side. The drag and the planks are then withdrawn, the ball pried or jacked up if necessary to straighten the plant, and a stone or two wedged under it to hold it so.

Water is applied as the earth is thrown back and tamped, thus "puddling" the plant and insuring a firm footing for it as the water soaks away.

A warm covering of hay prevents winter-killing due to drying winds, but if plants are moved from a sheltered spot to one open to strong winds a temporary windbreak will be required until the plants become acclimated.

THERE is no reason why one hundred per cent. success should not follow such winter planting if the three precautions below are heeded:

1. Do not leave the plants too long before moving them, after the soil has become frozen.

2. Be sure that no frost is in the floor of the new hole below the plant, and that no frozen earth is thrown back into the hole next to the roots. If only a little unfrozen soil is securable at planting time, it is better to "puddle" that in and surround the ball with hay to prevent its drying out until such time as loose soil is obtainable.

3. Cover the ground to prevent its freezing after the plants are in, and erect a temporary windbreak if necessary, leaving both until the middle of April or the first of May.

As to the cost of doing this sort of work, figuring men at $4.50, a team at $10.00, and a foreman (if necessary) at $10.00 a day, each large shrub could be transplanted for an average of $8.00-$10.00. At the above rates, the Box plants shown in the illustrations were moved for less than $10.00 each—those moved only a short distance costing as much as those moved on the drag, because of the extra digging. Hemlocks 20 ft. high, or Cedars, or Pines of this size could be transplanted under good conditions for from $10.00 to $20.00. Smaller specimens, say from 10 to 15 ft. not very heavy, could be moved for approximately $8.00 each.

SHIFTING TO GIVE ROOM

A Box plant being moved six feet to allow greater freedom of growth. The stake in the ball indicates "best" or front side of shrub and the other stake shows where center is to go

Early-flowering Double El Toreador, orange with reddish-brown coloring. Both early and late-flowering Tulips may have a double form (see page 120)

Early-flowering Single Brunhilde (syn: L'Unique), petals white delicately flushed yellow, a "self" (see page 120)

Do You Know Your Tulips?

REV. JOSEPH JACOB

Author of "Some Tales of the Tulip" (September, 1920, Garden Magazine) and other articles; also of "Tulips" the only book in English devoted to this long familiar and much loved garden group

Explaining the Garden Classes of This Ancient Mysterious Family That Still Presents Puzzles to be Solved

Photographs by Reginald A. Malby

A Fasciated Tulip, Toison d' Or, golden bronze shaded mahogany at base, showing three flowers which all spring from the one stalk, rather an unusual happening among the Breeder group to which Toison d' Or belongs (see page 120)

Sundew, a variety showing a new and unique form of sporting, all the segments being fringed along the edge with curious short emanations or excrescences (described on page 120)

A very old and odd Tulip painted between 1640 and 1650 at a time when the "self" or one color Tulip was considered of little value and the "broken" or "rectified" forms, with such strange markings as this, were held in high esteem (see page 120)

Cottage Tulip Faerie Queen, rosy heliotrope margined with amber. The flowers in this group are sometimes egg-shaped and sometimes more or less rounded as here (see description page 120)

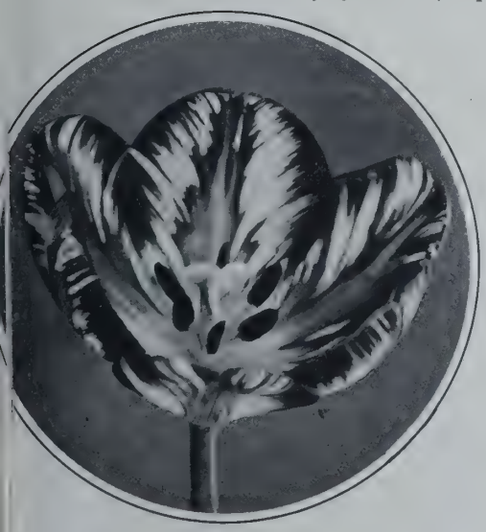
Darwin Type. Farncombe Sanders, geranium-scarlet with white center. (Characteristics of Darwin group described on page 120)

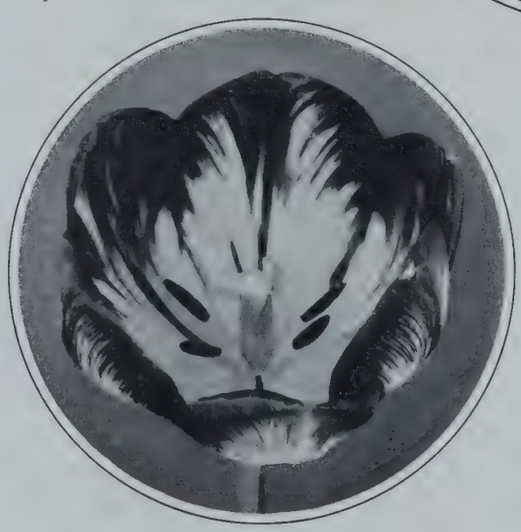
THE Tulip must have been an old garden flower in Turkey and Eastern Europe before any one in Western Europe knew of its existence. It was a genuine surprise to Busbecquius, the ambassador of the Emperor Ferdinand, when he saw it in 1554 in a garden between Adrianople and Constantinople. It was such a splendid flower that before very long it seems to have become fairly familiar in the western countries. In 1562 it reached Antwerp. In 1571 it reached Holland. Somewhere about 1580 it came to England, but it seems strange that it never got to France until 1611.

The outstanding event in Tulip history is the Tulip mania from 1635 to 1638. Everyone in certain parts of what is now Holland was seized with a mad wish to buy and sell Tulips. Ordinary occupations were given up. Rich and poor alike joined in the huge gamble—for it was nothing else. At first as prices rose everyone made money. Soon, however, there were more Tulips on the dealers' books than existed in the whole of Holland. Then early in 1637 the crash came, and all but a lucky few were ruined.

Notwithstanding this experience, Tulips continued to be grown. In fact, so far from the mania being an extinguisher, it was in practice a huge

Flamed Bizarre with dark markings on yellow ground exhibited at the Chelsea Show this year by Sir Daniel Hall, England's most famous living raiser of "florist's" (see page 120) Tulips





Parrot or Dragon Tulip Perfecta, golden yellow heavily blotched with rich deep scarlet; this group is noted for its brilliant, barbaric coloring and strangely fringed or laciniated petals (see page 120)

Feathered Bizarre seedling raised by Sir Daniel Hall. When the colored marking is confined to the edge of the petals, a flower is said to be "feathered" (see page 120 for distinction between "flamed" and "feathered")

advertisement, for from that time to the present this family has always held a high place among garden plants.

I have no knowledge as to the date when the Tulip crossed the Atlantic and landed in America. Did the Pilgrim Fathers bring some with them in the *Mayflower*, or did the bulbs wait until a very much later date to make the long journey? What is the rock out of which the present popularity has been hewn? The wonderful development of May-flowering varieties—what possibly was the match which lighted the fire? Was it the extensive spring bedding with early-flowering Tulips in the public gardens of Boston and other towns in the eighties of the last century? It may have been. Once at a horticultural dinner in London, I asked Mr. Ernest Krelage if he would tell the company where his father found those grand varieties which we now know as Darwins? He was not to be drawn. He made the oracular reply, "It is sufficient that we have them."

So without knowing the exact when and how the present popularity came about, we may just say, "It is sufficient that it exists." The Editor, recognizing the prominent place of the Tulip in present-day gardening, has asked me to try and tell readers something about the different types now existent. As the subject is a very big one naturally there is nothing for it but to deal with it in rather a sketchy manner by means of pictures and descriptive notes.

(1) EARLY SINGLE. Brunhilde, with a striking yellow flame on each segment of the white perianth. It is a self. Some Early Tulips are striped as, for example, Globe de Rigaud and Admiral Reinier. Early-flowering striped varieties similar to these last named were the Tulips of the mania time (1635–1637). One of the most famous was called Semper Augustus. All Tulips begin life as "selfs." Sooner or later they "break," or become "rectified" or striped. The reason for this strange change is still occupying the attention of botanists.

(2) EARLY DOUBLE. El Toreador, orange and reddish-brown coloring. Both early and late flowering Tulips may have a double form. As long back as 1665 double varieties were figured in flower books. Tulips toed the line with other flowers in the middle of the 18th Century when double flowers of all kinds were the rage.

(3) A VERY OLD TULIP. Painted by an unknown hand between 1640 and 1650. Note the pointed petals and the irregular markings compared with the rounded petals and symmetrical markings of the two Bizarres, numbers 4 and 5. At the time of the mania and for generations afterwards no one thought anything whatever of self (one color) Tulips. To be of value they must be "broken" or "rectified."

(4) FLAMED BIZARRE. Exhibited by Sir Daniel Hall at the Chelsea show this year (1924). Sir Daniel is the most famous living raiser of English florist's Tulips. There are three types of these: (a) Bizarres, with yellow bases and yellow grounds with dark markings; (b) Roses, with pure white bases and grounds and with markings of some shade of red or rose; and (c) Bybloemens, with pure white bases and grounds and markings of some shade of purple.

(5) FEATHERED BIZARRE. Seedling raised by Sir Daniel Hall. Note that here the color is confined to the edges of the petals whereas in the Flamed Bizarre the color was diffused all over the petals but in a more or less regular manner. Where the colored marking is confined to the edge of the petals a flower is said to be "feathered"; when there are in addition colored markings in the center of the petals as well as on the edges a flower is said to be "flamed." The value of a "show" flower depends on the symmetry of these markings. A Rembrandt Tulip is a "rectified" Darwin.

(6) DARWIN TULIP. Farncombe Sanders. This race was introduced into commerce in 1889 by the firm of Krelage & Son of Haarlem. They are distinguished by their strong stems, square bottoms, white or blue bases, and robust growth. A true Darwin has no yellow about it. They are either Roses or Bybloemens. Their advent has done more than anything else to make the Tulip the popular flower it is to-day.

(7) COTTAGE TULIP. Faerie Queen. This class has both long or egg-shaped flowers, as in Mrs. Moon and John Ruskin, and sometimes more or less rounded flowers as in Bouton d'Or and Faerie Queen. Their name originates from the fact that many of them have been found in cottage gardens in Great Britain and Ireland. I have been told that one of these varieties—the lovely rich yellow Avis Kennicott—was discovered in New England. If my information be true, how came it there, I wonder? Was it a passenger on the *Mayflower* or did some later emigrant take it with him as a reminder of the old country?

THREAD-PETALED TULIP

Tulipa acuminata, also known as T. cornuta, probably a sport, though its origin seems to be uncertain *(see accompanying text at right)*

(8) FASCIATED TULIP. The variety is Toison d'Or (syn: Golden Bronze). The picture illustrates two things (a) fasciation, and (b) a Breeder variety. Some Tulip species have normally two to four flowers on a stem, but practically all Cottage, Breeder, and Darwin Tulips have only one. Every now and then, however, they produce two or three flowers as in this Toison d'Or. The cause of this fasciation is hard to determine. It may be over rich soil, or extra ripening of the bulb. Toison d'Or is now called a Breeder Tulip. All self-flowered Tulips are "Breeders." The name was given them because their bulbs produce more offsets than do "broken" varieties. In popular usage the term is now confined to the darker colored selfs. Many have been found in Holland, hence they are frequently called Dutch Breeders. Examples are Goldfinder (British), Old Times (British), Golden Bronze (Dutch), and Gondvink (Dutch).

(9) PARROT TULIP. Perfecta. These strange and quaint varieties have been long known to Tulip people. Although 1690 is usually given as the first recorded date of a Parrot Tulip, I expect they existed long before as it is my firm belief that any Tulip may suddenly "sport" and take on this curious laciniated form. One of the last Parrots to come on the market is the lovely Fantasy, which is a sport of the well known Darwin variety, Clara Butt.

(10) THREAD-PETALED TULIP. (T. cornuta or acuminata). What this strange form came from is not known; I feel, however, that it is a sport as I have had similar sports among my own Tulips. A Tulip may not only sport by changing its shape or the number of the flowers on a stem, but also in its color. This is far the most usual form for a sport to take. Two good examples are White Beauty from Pink Beauty, where rose and white came all pure white; and De Wet (orange) from Prince of Austria (orange-red). "Sporting" is altogether different from "breaking."

(11) SUNDEW. A new and unique form of sporting. The variety was shown by Messrs. R. H. Bath, of Wisbech, England, this year. All the segments have an edge of short excrescences, which remind one of those on the leaves of the little marsh-growing Sundew. Hence its name. It was raised in Holland. It is figured here (page 118) to show that Tulips may sport in very many ways.

(12) TULIPA FOSTERIANA. For garden purposes species Tulips may be described as wild Tulips of various lands which are cultivated in gardens just as they are. They vary enormously in their coloring, shape, and size. Fosteriana is a very large, bright red, and is remarkable because both the base of the flower and the foliage varies in different plants. It is a new introduction.

(13) TULIPA LINIFOLIA, a brilliant sealing-wax red with a black base. The flowers in

Fosteriana (left), a very large, bright red Tulip with yellow center, a recent introduction from Bokhara (see page 120)

Tulipa linifolia (right), also from Bokhara, a brilliant sealing-wax red with black base. When fully open the flowers present a much flatter surface than those of Fosteriana and are very much smaller

the picture are only part open. When fully expanded they present a much flatter surface than do those of T. Fosteriana and they are very much smaller. Unfortunately the majority of species Tulips are difficult to keep going in English gardens and it is probably much the same in America except when the climatic conditions are very like those of their natural habitat. The only chance of keeping these "difficult" ones with us is by annually lifting the bulbs. T. Kaufmanniana (the Water-lily Tulip), T. dasystemon, T. persica, and T. praecox are four of the most easily cultivated species.

(14) Tulipa biflora turkestanica, a pretty variety from the Caucasus. The flowers are white with a yellow center and there are normally from two to four on a stem. T. dasystemon has a similar coloring, but the yellow center is more pronounced. It too has several blooms on a stem.

TOYING WITH TULIPS FOR FORTY YEARS

SHERMAN R. DUFFY

Persistent Types that Are Hardy, Permanent, and Prolific—Soils, Planting, and Feeding

WHEN it rains on St. Swithin's Day it is an excellent hunch to take up the choicest Tulip bulbs for, if the ancient legend of St. Swithin works out and that rain on his day is followed by six weeks of wet weather, it is not a good Tulip season. St. Swithin turned on the flood on July 15th this year and it has been an unusually wet season in my part of Illinois ever since. Believing that the successful growing of Tulip bulbs depends on giving them a summer baking, the only way to do so is to take them up if a wet season impends and there is no way to forecast such a condition except through St. Swithin's Day—which may or may not follow tradition! But if the ground is soggy in mid-July, it is a good idea to take up bulbs concerning which you have any doubts.

As my Tulips remain in the soil year in and year out, I do not expect as fine a display in the spring following a rainy summer season as after a hot, dry midsummer; and usually do not get it. This is a matter of observation extending over a period of years, as a large part of my Tulip stock is forty years old this fall and has been in continuous performance during this time, increasing until I have had a surplus of bulbs at every digging and I don't dig except when the bulbs become overcrowded or to change the arrangement.

This old stock, original foundation of my Tulip collection, was imported in the fall of 1884 from the ancient firm of Anton Roozen & Sons, Overveen, near Haarlem, Holland. It was a small collection of various classes of Tulips and included the little Duc van Thols (earliest of all, and which have disappeared from American trade lists) Single and Double Earlies, Single and Double Lates, Bizarres, Bybloems, and Parrots.

There remain of this stock a few of the Single Earlies, the Double Earlies, the Late Singles and Doubles, and the Parrots. The Duc van Thols were the first to go, followed by the Bizarres and Bybloems, none of which survived. The Single Earlies dwindled next; the rest have taken up permanent abode and there seems to be no reason to believe they won't be going in another forty years should I continue that long to watch them. Having no ambition to appear in the rare old print class, I will say before going any farther that the Tulips have been a family institution for years and that I have known Tulips by their front names since I was able to walk.

The Parrots are the most persistent. I don't care for them and can't lose them, as they

seem to stray into the plantings to create a riot despite efforts to weed them out—a most persistent group.

In the face of this record I have always debated the statement that Tulips are short lived and must be dug annually. My youngest planting is four years old. Others range from twenty years down. I have hundreds of witnesses who have come to see them each year who can testify that the Tulips mentioned are always present in force and have appeared regularly for years.

The main planting is a border 150 ft. long by 6 ft. wide and contains 50 varieties in blocks ranging from 25 to 100 bulbs of a variety. A large portion of it is composed of bulbs of my own raising, which causes me to debate also the statements that we cannot successfully grow our own Tulip bulbs. We certainly can, and we can grow new varieties from seed if we set about it; but there seems to be a national inhibition against growing anything from seed that doesn't bloom within two years at the latest and this seems to apply more especially to bulbs, for occasionally people do grow trees from seed.

The Single Early Tulips, with a few exceptions, I find comparatively short lived; I also find the Bybloems and the Bizarres the shortest lived of the late Tulips; and the Broken Darwin, or Rembrandt class has proved the most evanescent of all. The reason for the disappearance of the Broken Tulips is a puzzle to me, for they have persisted for centuries in Holland, and the English florists' Tulips likewise have persisted for periods of great length. To make it more puzzling, the Parrots which are broken forms are the most persistent.

I think it is safe to say that given proper soil conditions, the Tulip is as permanent a perennial as we have.

WHAT ARE SUITABLE SOIL CONDITIONS?

FOR some time I have entertained the theory that plants which lose their roots or whose foliage disappears early in the year, or both, as in the case of the Tulip, demand a summer baking to mature properly. In light sandy soil they find this condition, which I believe is the reason they grow so persistently for me. They are on a south slope in light soil that is so hot in midsummer that I make no effort to grow anything in it after the Tulips are done. The warmth gets clear down to the bulbs. In this kind of soil annual digging is not necessary. They attain a "status quo" after a time, and the same clump will, year after year, give usually two or three, or in some cases up to nine, flowers without showing the customary increase of offsets of more newly planted bulbs. I have such a group of an old double form which has come up in a path for years and produced from two to five flowers, never more than that number and very few of the small leaves indicating offsets.

This happens, according to my observations, after the bulbs have burrowed to a depth that suits them, where the blooming bulb reproduces itself but does not throw any strength into the production of offsets. I don't know just how far down a Tulip bulb will go, but I wanted to get one clump out of the way and went down eighteen inches without reaching the bulb. It had been in the same place for about ten years that I know of, and the deeper they are, the sturdier their stems seem to be; which to me is an argument for deep planting in light soils.

In cold, heavy soils annual digging is necessary to keep the bulbs, I believe, because this is the only way they can get the warm summer baking that they need. The Tulip, so far as we know, is a native of the Orient, having been first found in Constantinople, and undoubtedly gets this summer baking in its habitat. Oriental Poppies flourish like weeds for me, while friends with better and heavier, but colder, soil are unable to get such huge flowers and luxuriant growth as I do where they are well baked every season.

So the advice to dig Tulips annually should be qualified to read "if they are in a cool or heavy soil" and when they are stored it should not be in a cool cellar as I have often seen advised but rather in a barn or some place which will be kept warm. I have always stored mine in a barn that caught the blazing summer sun and was no comfortable place to invade, but the Tulip bulbs stored there have always done nobly. A summer bake in a warmth that reaches the bulb is, I am inclined to think, the secret of Tulip longevity, although I never ran across any authoritative backing for this theory until this year when I found that Mr. W. R. Dykes, secretary of the Royal Horticultural Society of England, expressed something of the same idea in an article, and the Editor of THE GARDEN MAGAZINE AND HOME BUILDER assured me that he also believed it to be the truth. At any rate, it works, which is all that can be reasonably expected of any theory.

A QUESTION OF ACCLIMATION?

ANOTHER theory that has occurred to me in observing the behavior of Tulips and several other plants is that imported plants sometimes go through a period of acclimating during which some will fail to survive and the others will adapt themselves and continue to flourish if their wants are noted and given slight attention. This is, I think, the reason why a certain small proportion of Tulip bulbs is likely to be lost the second or third year after planting, giving full and fine bloom the first spring after planting and then gradually dwindling, while others of the same variety take hold and flourish. We know this is largely true of some other plants, so why is it not reasonable concerning the Tulip?

Tulips, once they decide to grow, multiply rapidly. I dug a four-year-old clump of Picotee a short time ago and found twelve bulbs of assorted sizes, four of them being of assured blooming size while one or two more possibly would give blossoms. It is a simple matter to grade these offsets of any variety desired in quantity, planting the small, non-blooming size in rows in some convenient place and allowing them to grow for a couple of seasons, pinching the small blooms that show occasionally so as to throw strength into the bulb. Two seasons will bring the medium-sized into fine bulbs.

GROWING ON YOUNG BULBS

HAVING no advice in the matter, I formerly reasoned that if they were formed on the parent bulb at a depth of six inches, young bulbs ought to be planted at that depth when removed, but later practice, I believe, has shown that the small bulbs do best when sown about three inches (or not more than four) deep. I sow the small bulbs about two inches apart and give them no more attention except to cultivate occasionally and keep down the weeds until the size of the leaves shows that they have reached the age for blooming the next season. It is no trick at all to increase a stock rapidly in this manner. I have done it for years and have given away hundreds of bulbs of my own raising.

Being an addict of the seed habit and enjoying watching the development of infant life of any kind, naturally I have sown Tulip seeds. I can't withstand the temptation and have mavericks all about the garden which are seedlings because they could not have come from anywhere else. As the seeds germinate, the young Tulips look for all the world like young Onions just breaking through. I have left them alone to develop. As nearly as I can figure, they bloom in about five years and so far as I can observe none of these seedling Tulips is a really bad Tulip. I have this year sown some seed to watch and keep tab for accurate information. I know that they grow readily from seed which germinates along early in September when sown as soon as ripe in early July. It would be better, perhaps, to wait until fall to sow it.

I hoe a good coating of bonemeal into my Tulip beds every alternate year, and sometimes that is omitted. While they respond very quickly to a change of soil, surprisingly at times, they get no change of soil from me because there isn't any more soil to change them to, Tulips being tucked into all available nooks about the garden. I really like them best coming up in groups of from two to half a dozen among the early perennials where most delightful garden pictures are simply made and in remarkable variety.

Daffodils of the Better Kind

PART II

S. STILLMAN BERRY

Photographs by William N. Kline, Jr.

The Incomparabilis and Barri Groups, also the True Jonquil

Notable Members of the Trumpet and Leedsi Groups were described by Mr. Berry on pages 23-25 of the September issue

FOR many, the Incomparabilis or "Star Daffodils" exercise a peculiar fascination. They are among the loveliest when used in the house as table flowers, where their subtle forms and colorings delightfully reward the most minute inspection, and they are noble garden flowers likewise. Unfortunately they are not nearly so commonly grown in the United States as their merits warrant and where one does see them, varieties like GLORIA MUNDI and the dashing but rather ragged SIR WATKIN are about as far as the garden owner progresses. These are both still worth growing, especially where they can to some extent be naturalized, but newer members of the section are now available which far surpass them.

Among the latter there is one much advertised variety which my experience does not lead me to include. This is GREAT WARLEY, which, as I have it, is a large but rather awkward flower with the perianth segments very poorly imbricated so that they rapidly develop that ugly narrowing previously referred to as so destructive of daffodil charm. Yet this variety has a certain effectiveness even at this, its worst, and in some gardens doubtless develops into an imposing flower. In this latter eventuality it becomes decidedly worth trying.

But for me there is now just one of the giant Incomparabilis types beyond which I cannot see far, BERNARDINO. Several years ago I read a delightful little book on Daffodils by the Rev. Joseph Jacob in which he ventured a list of the then varieties that he "would stage in an open competition for 'the best twelve Daffodil blooms,' supposing he had an unlimited purse and a free choice of all the varieties in the world," a list which, he naïvely added, "would take some beating." Most of the varieties there cited are little known in this country, and I must therefore confess to never having had the opportunity to see them. No doubt by now some are surpassed abroad and the Rev. Jacob would compile quite a different selection; but I have always been made the more eager to see all the rest of these varieties by the fact that the aristocratic dozen is headed, even though perhaps merely alphabetically, by Bernardino. This I have grown off and on for a number of years and find it hard to improve upon the terse description in Barr's catalogue—"a very beautiful

ELGIVA

One of the loveliest of the more modest members of the Barri or Short-cupped Daffodils, a rather small but winsome little aristocrat especially charming for cutting. Perianth cream-colored, bright apricot-orange cup

CAESAR

Well-nigh the noblest Poet of them all, valuable too for its lateness

BERNARDINO (left)

A very beautiful Incomparabilis or Star Daffodil with a large creamy perianth and a big pale cup prettily fluted and heavily stained deep orange-apricot, of remarkable lasting quality

CASSANDRA

An almost perfect flower, serene in every detail with a perianth of pure unsullied white; a lovely member of the Poeticus group

flower, with large broad creamy perianth and a very large pale cup, prettily fluted and heavily stained deep orange-apricot, a good free grower, ht. 22 in." To this might be added a note to the effect that the perianth segments are very well imbricated and that the flower possesses remarkable lasting quality, that all in all it is indeed an "incomparably" perfect Daffodil!

Yet in succumbing to the blandishments of these big fellows, the less pretentious charms of many of the smaller varieties of Incomparabilis type should not be forgotten. The small-crowned AUTOCRAT, the fiery LUCIFER, and the starry STELLA are already fairly well known in our gardens. LUCIFER, with its rich vermilion-orange cup, is a particularly showy Daffodil, and where it does not bloom itself out as it is, alas, too prone to do with me, is one of the very indispensables.

BEDOUIN, with a fair sized flower, which is small only by the side of Bernardino or Great Warley, is still too rarely seen. It has a white or nearly white perianth, and a crinkly brilliant orange cup.

HOMESPUN is with me one of the smallest, but most exquisitely proportioned and coming into flower fairly early though marked "(3)" in blooming time by Barr. It is light yellow, with a deeper crown which is both wide and nicely frilled. Rev. Jacob, who gives a beautiful illustration of it in color, calls Homespun "a perfect show flower." This is a case where I frankly wish for a little more sizableness, however.

AMONG the Barri or Short-cupped Daffodils, I have unfortunately not experimented with a very great number. The old CONSPICUUS is a representative member of this group, and is still a fine Narcissus, growing in the garden with much of the graceful abandon of a wild thing, so that few Daffodils are lovelier for entering into a free pictorial composition. LADY GODIVA and the rather late flowering ALBATROSS are also fairly well known in our gardens, and they are very good. COSSACK is a newer one, not at all large-flowered here, but has a very handsome white perianth surrounding a richly colored cup, and is a nice Daffodil when the slugs and cutworms will leave it alone. In my garden these beasts seem to have become especially enamored of this variety and also of MASTERPIECE. The latter is one of *the* famous Daffodils of the Barri section. It has been so sought for in England that only now is it becoming reasonable in price, but here it has by no means fulfilled expectation and after several seasons of disappointment I am wondering whether my stock can be really true.

One of the loveliest of the more modest members of the group is the dainty ELGIVA. It is rather small but a winsome little aristocrat just the same and an especially charming flower for cutting. Its unusual individualism in appearance as contrasted with other Barri is due to the ostensibly pointed, but actually spoon-shaped segments of the perianth, while the bright apricot-orange cup is irregularly flanged and fluted.

As a boy in New England I remember a certain very old garden where the returning spring-time recurrently brought great rich masses of purple Lilacs and processions of a marvelously pure flower with broad white petals and in the center an amazing concentrically yellow-and-red lined cup. The old folks called them just "Daffodils,"—I thought they were among the most wonderful and beautiful objects I had ever beheld. So far as I have learned since the genuine old English "Daffodyl" or "Daffodil" was one of the wild trumpet types, and I know now that these chaste New England flowers were the Poet's Daffodil or Poet's Narcissus (N. poeticus), but my affection for them and wonder has never faltered, and I still grow all that I can lay my hands on or that my little garden will contain.

There is no striking variation evident as yet among the rapidly increasing list of named varieties, and a very slight widening of segment, reddening of cup, or increase in circularity of outline seems in general to be thought quite sufficient ground to justify the introduction of a novelty. Such a statement is not to be construed as a disparagement of the work of the many patient breeders of this Narcissus, but merely that their efforts have been as a rule directed toward the gradual improvement of the existing wild races, themselves already almost unutterably charming, than toward striking breaks of type, and that the differences are therefore mainly to be found in size, in imbrication of perianth, and in the relative period of bloom, which has, as a consequence of much careful work, been lengthened over a period of several weeks. So the ordinary gardener will likely not want more than two or three of the Poet's type, preferring to grow certain selected favorites in quantity, rather than divide a limited space among too many sorts differing from one another but negligibly.

With me the first to blow is the happily named HORACE, a tall noble variety, very floriferous, with a fine flat perianth, but especially notable for the nearly uniform brick-orange coloring of the eye when the flower first opens, the usual zonation developing by the fading process later.

Before HORACE has waned very far, the lovely CASSANDRA comes in, not quite so tall perhaps, but an almost perfect flower, serene in every detail. Surely few flowers can show such pure unsullied white as we find in the perianth of CASSANDRA. The old POETICUS ORNATUS and the PHEASANT'S EYE (RECURVUS) now seem tiny in comparison with these giants, but are winsome flowers for semi-naturalization and have a fresh spring-time insouciance that their grander brothers and sisters do not quite attain. Here ORNATUS blooms with CASSANDRA, but in a shadier nook will generally outlast it.

Very late, after all the foregoing in procession have passed their prime, comes CAESAR. This has a somewhat shorter stem than CASSANDRA or HORACE, but is a large flower with broad, overlapping, and somewhat reflexing perianth segments of remarkable substance. It is not only valuable for its lateness, but is one of the richest in appearance of all the Poets. The DOUBLE POETICUS, or Gardenia-flowered Narcissus, which should be the last of all, even later than CAESAR, and is such a treasure in the many Eastern gardens to which it is congenial, is an unhappy failure in mine. The plants grow and increase well and send up no end of plump buds but these, after promising much, seem never able to burst open their spathe envelopes. In the end they invariably blast, and never a flower have I had. The season is so advanced when the buds appear that the heat and dryness of the atmosphere of our approaching summer seem too much for them, no matter how shady a nook they may occupy.

NO ACCOUNT of the modern Daffodil, however cursory, is complete without reference to those interesting hybrids between Narcissus poeticus and the Bunch-flowered species, N. tazetta, which for once form an entirely natural group in the catalogues under the composite name "Poetaz." For garden purposes many of these cluster-flowered types are very charming.

My happiest experiences have been with the soft yellow Helios, earliest and best of all the Poetaz sorts that I have grown, with the beautiful white and yellow Elvira, coming in just as Helios is passing; and, for a late variety, with Profusion, possessing dainty flowers of characteristic outline. This last is an extremely floriferous plant the first year or two, but the clumps then become rapidly crowded and the flowers shy, and must be taken up, pulled apart, and replanted. The variety Irene has a poor constitution and I have practically given up trying to grow it.

THE Rush-leaved Narcissus, or "Jonquil," has distinctly lagged behind the other groups in the production of new garden forms. The only recent introduction I have tried is Rugulosus Maximus, which is practically but a larger Campernelle Jonquil, well worth growing if only it will prove to possess a good physique.

[A word of caution to the unwary here: the name Jonquil is misapplied by the cut flower trade to include Trumpet Daffodils of any kind, and some bulb dealers are consequently misusing the name in offering bulbs for sale. Ed.]

Finally reference must be made to that most graceful and lovely of small Daffodils, Queen of Spain, not an artificial garden creation as one might think from the name, but a collected form of Narcissus triandrus thought to be of hybrid origin. It is not a new thing at all, but American gardens have been strangely slow in appreciating its charm, and we have therefore still to learn how permanent a feature of the daffodil bed our conditions will permit it to become. Light yellow with a perianth reflexing almost like a Dodecatheon, what could be more exquisite than a thousand of them all nodding together—unless indeed it were two thousand!

HOME GRAPES ARE THE BEST GRAPES

J. HORACE MACFARLAND

Author of "Walks and Talks of Breeze Hill" (Oct., 1923, and previous issues) and many other articles and recent books on Roses including "Roses and How to Grow Them"

Free Watering one Secret of Success with a Score of Kinds Which Flourish in the Breese Hill Philosopher's Garden, Delighting Both Humans and Birds

PROBABLY because my earliest garden recollections are of two vineyards—one about the home that included thirty or more varieties, and the other a sizable commercial vineyard of which I had to market the product—I have done my best with Grapes at Breeze Hill. There was also reason for this in the fact that the house in which I now live was the mansion house of a large vineyard, with a grape history of more than eighty years.

Indeed, when in 1909, I came to own just a little of that great grape-patch, there yet remained many old, very old vines, a dozen of which, said to have been planted in 1858, I made the nucleus of my own little home vineyard. These dozen veterans, rugged and heavy, with tree-like stems, have been "made over" by pruning, and they bear just as much and just as good fruit as do the younger vines beside them, planted in 1910 and later.

THE old vines were all Concord but one. I added other Concords, and also Campbell Early, Niagara, Brighton, Delaware, Goethe, Green Mountain, Dutchess Lindley, Barry, Salem, and lately Catawba (an old favorite), Caco, and Hubbard. It is to me a real pleasure to note the varying habits, maturity, appearance and flavor of these various sorts, and to have others also enjoy them in due course.

It is conventional among fruit fanciers to sneer at Concord and Niagara, the Grapes of widest American growth and use, calling their flavor "foxy" because it does not resemble the globules of sweetened water these critics claim to admire. They affect to rave over the small and sweet berries of Delaware, but I have long noticed that in an open vineyard these same sharps will eat three bunches of Concord or Niagara to one of their alleged favorite, said to be the standard of quality among American Grapes.

To my presumably crude taste, that same "foxiness" of flavor, honestly come by, through Labrusca parentage, is delightful not only in the Concord group (now said to produce full 75 per cent. of all the Grapes grown in America), but in the other sorts in which it is admitted to produce what is more euphoniously called an "aromatic" flavor. Lindley and Salem, for example, and the rich Barry, are far more sprightly and interesting to eat than many of the European or Vinifera forms so much admired.

Brighton is probably the compromise sort, at least here at Breeze Hill, for it is always liked, whenever it is possible to reserve any of its great-shouldered clusters from the predatory robins and catbirds. The latter, by the way, have now learned how to get through the protecting bags without which I would be grapeless. In the dewy mornings they perch on the bags, their claws evidently making the initial openings through which they eat only the top grapes, the bees and wasps soon finishing the job and the bunch. I tried to fool them one year with bags of varied colors—white, manilla, pink, red, brown, black—but they got in just the same, and particularly on the Brighton, which they seem to have selected as their favorite. I'm planning to use paraffined bags another season, which will probably cause the robins to work out a scheme for heating their claws! We give them half our cherries and strawberries, all our blackberries and most of our red raspberries, to say nothing of providing an assortment of berried shrubs for dessert. Breeze Hill is surely a bird boarding house!

Among my favorite Grapes—after the "foxy" Concord and Niagara and the dainty Brighton—is the green Dutchess, which has a rarely delicate flavor, and a skin so free from astringency that it may be eaten as readily as that of a Malaga. It is a shy bearer, but worth petting.

I FIND that Grapes need much of what they are mostly made of; namely water. In a dry season, some of the Concord bunches fail to ripen, or did so fail until I used the sprinklers liberally so as to soak the ground at least three times while the fruit is maturing. In the season of 1921 a heavy crop was thus matured, despite a six-inch shortage in local rainfall.

Home Grapes are the best Grapes. Indeed, a garden home must have Grapes, even if Figs are absent, so that one may live at least under his own vine, if not under his own Fig tree. And these home Grapes, bagged so that when one cuts the bunches before breakfast in the cool of a September morn, he has them in clean and cool freshness, are not at all to be compared with the wilted fruit from the grocer's basket.

Unobtrusiveness is sometimes the epitome of perfection—not until we begin to study the detail do we realize the fine proportion and restraint which make this room so restful: there is no lost effort, no meaningless ornamentation to disturb its spaciousness and peace. The treatment of the fireplace is refreshingly simple and noteworthy, with a very interesting use of brickwork

The Home of
Mr. C. W. Morris
at
Haverford, Pennsylvania

Mellor, Meigs & Howe
Architects

Photographs by Philip B. Wallace

The difference between master craftsmen and lesser workers in any art is sometimes betrayed by apparently insignificant details. Some people focus on big effects, others fuss over minor matters, but the true artist knows that all parts of a plan are essential and will not mar a fine conception by inappropriate finishings. Everything in this hallway has been considered so that even the wall-radiator, lighting brackets, etc., are in keeping with the distinguished spirit of the whole

A BEAUTIFUL USE OF BRICKWORK

An amazing ingenuity is evident and yet no sense of forced striving after effect but rather the play of an imagination which delights in pattern for its own sake and an appreciation of the vivacity it can give to what might otherwise prove a too ponderous whole—even the chimney has come in for its share! Entrance to the Haverford (Pa.) home of Mr. C. W. Morris; designed by Mellor, Meigs & Howe

JOHN W. GERARD—A GREAT GARDENER

FRANK H. PRESBY

Treasurer of the American Iris Society

WHEN John W. Gerard died at his home in Elizabeth, N. J., on August 20th, America lost the man who many years ago was probably its foremost amateur gardener. He was in his eighty-first year and though many of those who read this may have seen his garden notes, and we Iris lovers are very familiar with his article on Iris in Bailey's "Cyclopedia," yet to this generation, however, this fine man was not known as he was to some of the earlier generation fortunate enough to have met him many years ago when he lived in North Elizabeth and had his unique garden full of rare bulbs and flowers.

As a lad, I had but a slight appreciation of flowers and when frequenting the Newark Public Library found Prof. Sargent's great magazine *Garden and Forest* on the reading tables. In every number I would see garden notes by Mr. Gerard. I decided to hunt him up, so started early one Sunday morning for his home. After a long ride in several horse cars and much walking I finally reached his place and, of course, found him (where you will always find the good gardener!) in his garden. I introduced myself and we at once became friends—the friendship has lasted ever since.

All the love I have for flowers and especially for Iris came from my early acquaintance with Mr. Gerard. He showed me the first real rock garden with Alpines blooming in it. His collection of Iris was probably the largest collection in the country in those days. He introduced me to many rare bulbs, and I well remember his Chrysanthemum Show given a large tent on his lawn—plants all grown b himself—and visited by hundreds. He had s many rare plants in his little garden and greer house that it was a liberal education to vis him any time in the year. When I built m home in Montclair I had but one variety c Iris (pallida dalmatica). Mr. Gerard gave m liberally from his entire collection and thu started me collecting this lovely family c plants.

Mr. Gerard was one of the finest gentleme I have ever had the honor of knowing. H home life, his genial smile, his generous plea ure in giving freely of his plants and his know edge was always evident, and we who kne him realize our loss.

HOW I PLANT MY ROSES

REV. SPENCER S. SULLIGER, D. D.

Fall Planting with Winter Protection a Proven Success both East and West

LATE fall is decidedly better than spring for the planting of Roses in the Pacific Northwest, and I am sure this will also be found to be true of the East. [Many commercial Rose growers endorse this view. Ed.] Plant late enough to insure against any growing of the bush soon after it is set out. If planted so early in the autumn that growth comes before the weather is cold enough to keep the bush dormant, it is frozen back, with the sure result of weakening the growth the next spring. In the Pacific Northwest the time of planting should be late in November or early in December. The roots will do the growing during the winter months and the spring will see a root growth that will utilize any reasonable amount of fertilizer and result in heavy leafage and abundant bloom.

I am not unmindful of the fact that there may well be more than one practical and successful way of planting Roses. But if success has attended a specific method then one naturally wants to pass the good word on. So, here is my way:

First: Indifferent preparation of soil is a prolific cause of failure in growing the best Roses. Without question, a clay soil base is best. While some varieties, especially Tea Roses, do very well in light or sandy soil, the ideal is a clay soil, fertilized up to the limit. If proper natural drainage is lacking, then it will pay to dig out the whole bed to the depth of eighteen inches or more and put in the bottom a layer of broken stone, gravel, or other drainage material. Replace the soil and let it settle well before doing the planting. If you have proper drainage, all that work can be saved.

If the soil is sandy or very light, then it will pay to dig out the soil as for drainage, mix it half and half with good clay soil, refilling the bed with this mixed soil, letting it settle well before planting.

Second: Preparatory to the actual work of planting, I have on hand a *compost soil*, made as follows: First build wooden frames, about 24 x 36 inches and about 8 inches deep and having, of course, neither top nor bottom. One of these frames is placed on a boa foundation and filled by first putting a lay of up-turned sod, then a layer of one inch fresh cow manure or one-fourth inch of shee guano*, with a good sprinkling of finely grour bonemeal and soot on top of this. Then a other layer of the up-turned sod and on tc of it another layer of the fertilizer, bonemea and soot; and so on until the top of the fran is reached. Then put on another frame an repeat the process until about four frames a filled, the top layer of the whole stack being up-turned sod. *Make all the sod soaking w before it is put in the frames.* Cover the tc of this stack of filled frames so the rains canno leach out the fertilizer. Let it alone for a least one year—two years is much bette Each year I have one of these stacks of con post soil ready for use.

*For making the compost soil instead of shee guano, I frequently use "C. M." a dried and pu verized cow manure that is on the Western marke but always use the sheep guano for mixing with th bonemeal that goes on top of the planted Rose, a described on the following page.

Third: Properly prune the Rose bush to be planted by cutting out all small or weak growth, as well as other growth, so that *only* three or four good healthy canes are left. Cut these back to about eight inches in length, with an out-pointing eye at the end of each cane. Cut the heavy root growth back to about seven or eight inches, as well as cut out entirely all crowded, crossed, diseased, dead or bruised roots. Put the Rose bush, thus prepared, in water up to a few inches of the tops of the canes. This should be done from twelve to twenty-four hours before the time of planting and done in the shade and away from drying wind.

Fourth: Now, for the actual work of planting. Dig a hole one foot or more in depth and eighteen inches in diameter, where the Rose bush is to go. Put in the bottom of this hole enough of the compost soil, *which has been well mixed, half and half, with good clay soil,* to bring the bush high enough so the grafted or budded knob will be two or three inches under the surface of the bed when the planting is finished. If the natural soil of the rose bed is not too light or sandy, it can be used, instead of the clay soil, to mix with the compost soil. Holding the prepared Rose bush in one hand, carefully separate and spread out the roots with the other hand and put on top of these roots at least one inch — two inches is better — of the compost and clay soil mixture. Press this down firmly with the feet. I get in the hole with both feet and just walk all around that Rose bush. On this pressed down surface spread eight inches of sheep guano and four ounces of mixed coarse and fine bonemeal. Fill in to a little above the top of the bed with the soil that was removed to make the planting hole, but do not press this down.

If you have not the compost soil here mentioned ready for your first planting, then mix well-rotted cow manure with equal parts of clay soil and that obtained by digging out the soil near to and among the grass roots of sod. I have never done this, but I believe, if the manure is well rotted, it could be used without injury to the roots.

I do not put any fertilizer under Rose roots when planting. I have tested it out carefully and (so far as the Pacific Northwest is concerned) it is a waste of fertilizer. Our rains are usually gentle and rarely ever so heavy but that the rain soaks into the ground as it falls. This means that the fertilizer placed under the roots of a Rose bush is soon carried to a depth far below where the feeding roots of the Rose can reach it.

Finally: Any one having good garden soil, who will properly prune and carefully plant good, healthy Rose bushes in that same soil, will have beautiful Roses in abundance. But, if one is going to contest in a Rose show, or wants to grow the best and most perfect blooms, then it pays to take all the trouble in planting here advocated, and to follow the plantings with proper feeding, spraying, disbudding, and cultivation. [See Rev. Mr. Sulliger's article "How I Feed My Roses," April, 1924, GARDEN MAGAZINE, *Ed.*]

"GOD MAKES HIM ROSES FAST"

Life is a magical thing when we stop to think about it—a little dry slip of a bush set out in late autumn carries enough life in its body to weather over winter and take on new glory with the coming of spring. Bush and Climbing Roses at the home of Mr. Alfred C. Rode, Lake Mahopac, N. Y.

AN EASTERN CORROBORATION

J. G. EISELE, *Riverton N. J.*

FALL is undoubtedly the best time in this section of the country as well as in the Northwest to plant Roses, providing care is taken to properly protect with a soil mulch.

In this latitude (of Philadelphia) we have found the most satisfactory method of protection is to draw up a mound of soil, from eight to twelve inches high, around the base of the plant. The stems will then be buried in the mound of soil, thus giving the eyes at the base of the plant the desired protection. Cover the entire bed, after the ground begins to freeze, with any loose material, such as strawy manure, evergreen boughs or corn stalks. The idea is not to keep the ground from freezing, but to prevent the injurious alternate freezing and thawing.

Here also the planting should be deferred until the end of October or early November. The plants should be thoroughly ripened before they are disturbed, and as a rule we (H. A. Dreer Co.,) do not make shipments for fall planting until the first week in November.

FEEDING ROSES IS REWARDED

YOU may be interested to know that, following Mr. Sulliger's Rose feeding plan given in the April GARDEN MAGAZINE, I have had unusual success this year. We captured three firsts in classes of six best Teas. In fact, in one class, with the most desirable prize, we won first and third.— EDWARD M. CHASE, *New Rochelle, N. Y.*

AMONG OUR GARDEN NEIGHBORS

Readers' Open Column for Exchange of Comment and Experience

Plants Wanted!

TO THE EDITORS:

Where can I secure the following: Adonis amurensis, Adonis vernalis, and the three following hardy Cyclamen, coum, europeum, neapolitanum?

I have tried pretty well over this country but, as it is impossible to import them from Europe, I do not want to leave any stone unturned.—RICHARD HAUGHTON, *Philadelphia, Pa.*

Over-Seas Appreciation

TO THE EDITORS:

Let me tell you how much I appreciate THE GARDEN MAGAZINE & HOME BUILDER. The wonderful pictured gardens are an inspiration to us. We have as yet nothing to compare with them in little New Zealand.

It has been said that "a garden is a beautiful book, writ by the finger of God; every leaf and every flower is a letter, and you have only to learn them to know what a wonderful story you are going through." THE GARDEN MAGAZINE & HOME BUILDER has helped me to learn the letters and gradually understand the beauty of our "garden book" and I thank you sincerely for bringing it to my notice.—CARAE MUNDAY, *Spreydon, Christ Church, N. Z.*

The Rare Jewel of Consistence

TO THE EDITORS:

I am very much interested to learn that THE GARDEN is to embrace the house in the future. That is quite as it should be. Too frequently the garden is not even a distant cousin in its relationship to the house. I realize that consistence is a rare jewel, and I do like to see a house of any particular style surrounded by a garden that is appropriate. In selecting an architect, a client who chooses a man who has more than the average knowledge of landscape gardening is to be congratulated.

An architect who has the gift of composition, which in my humble opinion is the first essential, should be able to so blend the house and garden as to make the one complement the other, and not merely drag in pergolas and stepping stones and pools, etc., just because there are such things.

It is indeed gratifying to see the development not merely of the house but of the garden in America and we look to THE GARDEN MAGAZINE & HOME BUILDER to further influence the public by giving the very best there is in their publication.—ANGELO HEWETSON, *Alameda, Cal.*

Building the Garden First

TO THE EDITORS:

As an older member of your family of readers I want to touch on several topics, of special interest to me, and possibly to others.

First, and most important, in the editorial foreword to the very interesting article in the February issue entitled, "Making a Small Garden Look Large," you suggest that this is of timely interest for those owning a lot and waiting for the price of building to come down. If this advice is taken literally, it will mean many future heartaches, since the average sites range in size from 50 x 100 ft. to 80 x 200 ft., the latter being comparatively few. Consider that the average single house measures 32 x 28 ft., is set back on a building line of 30 to 40 ft., and the excavators must have at least 25 ft. in the rear of house line, 10 to 20 ft. at sides, and all of the ground to move their teams—it is simple figuring as to how much of the planting would be left by the time the building is completed!

However, the basic idea is sound, but must be carried out in a slightly different way. Proceed, as stated, with the landscape architect's layout, preferably in conjunction with the architect's plan of the future house. Then obtain the stock required, which can be in the smaller inexpensive sizes, and plant some in nursery rows, from rear toward front of lot (the rows, not the direction); transplant once a year, and root prune; when ready to build, heel in everything out of the way of area of operations, and when building is completed and final grading finished, set plants, etc., where called for in grounds layout, and you will be either the number of years growth ahead, or its equivalent in money. We are in the building business, and we believe that upon reconsideration, the Editors will agree that the point is correctly taken.

Secondly, on the east side of our house, comparatively sheltered, there is space available for a hotbed; a cellar window opens on same, and our idea was to build it about the window, so that the window could be kept open from the cellar, letting the heat enter the hotbed, and thus doing away with the need of manure. The sash would slope from the side of the building and face toward the east, so that the hotbed would have the benefit of the morning sun. Is there any reason (because of coal gas, etc.) why this idea is not practical? —F. O. QOEBEN, *Hartford, Conn.*

—On page 146 of the Nov., 1921, G. M., in W. L. Wilson's article on "Winter Gardening for a Spring Start" will be found a description of the making of a cellar-window frame, also photograph of such a frame in use. Of course the arrangement must be such that coal gas does not enter.—ED.

Sweet-Peas in Texas

TO THE EDITORS:

I want to tell you how much I enjoy each number—the Open Column most of all. Here is an item for it.

Last December 23rd I had some volunteer Sweet-peas scattered about the garden. I had them transplanted to a straight trench and on April 23rd they were blooming. They seem to be quite as thrifty and large as those grown in the usual way. Texas just now is a vast flower garden—the prairies a mass of Bluebonnets, Indian Pinks, and many other flowers. The flower gardens surrounding the homes are fragrant with Chinaberry, Honeysuckle, and Roses.—MRS. C. R. NASH, *Kaufman, Texas.*

Who Can Answer Ohio?

TO THE EDITORS:

Having read many very interesting articles in the Open Column from all sections of the country, I am wondering if any northern readers have had experience with Acanthus mollis, the Astilbes, and Belamcanda or Blackberry Lily and, if so, how far north these plants are hardy?

Have read many comments on Scillas, Snowdrops, and Grape-hyacinths. We live not far from the Lake in northern Ohio, on one of the sandy ridges. For me Snowdrops increase by seed quite readily. Am not so sure about bulb increase. Scillas increase

quite rapidly, both by seed and from the bulb; and Chionodoxa does the same. Grape-hyacinths increased so fast, both by seed and bulb, that they became almost a problem until I decided to turn them into a commercial venture. Muscari plumosa increases from the bulb, but the buds usually blight. Has any one had experience with a dwarf yellow Allium (probably Moly)? Mine bloomed at first, but now blossom scarcely at all.—LOU E. HURST, *West Dover, Ohio.*

Seeds of Bulbs and Some Curious Plants

TO THE EDITORS:

In the July issue Mr. Garrity asks about Bupthalmum salicifolium. Fottler, Fiske & Rawson, of Boston, and Vaughan's seed stores in New York carried it last year. If seeds be not procurable, send address and this fall I will send some. I have, too, seeds of the pale Corydalis if "A Reader of G. M." wants them. Lamium maculatum, also mentioned in July issue, comes in pink and white and I have both sorts. Reading in the August issue about bulbs in America sets me thinking. Some bulbs do not seed for me, but this year I have some fine little Darwins from last year's Tulip seeds. I grow Grape Hyacinths from seeds and this year have some Trumpet Narcissus seeds to plant. Bearded Iris do not seed for me. I also have some Lilies of the Valley coming from seeds, and Sophora, Incarvillea, Hypericum, Hyacinthus, and many other perennials from my own seeds. This year for the first time I had seeds ripen on the Bleeding-heart, which I always propagate from cuttings. I have the old pink and a few of the white June Pinks, but they are the sort which burst the calyx. I never saw any really double ones that didn't. The Chinese yellow Clematis has this year set seeds, but they may not be fertile. Yucca glauca bloomed a month ahead of Y. filamentosa and was like immense Lilies-of-the-Valley. The Chinese Bush-cherry has this year covered itself with bright red fruit which I like much better than our own sour red Cherry. Miles' Spiral Mignonette lived through the winter in the garden, and Mariposa Tulips came through all right. Hypoxis erecta is thriving in captivity among rocks and blooms from June until late October. The new Rudbeckia intermedia wintered safely and is full of buds; Lysimachia clethroides is lovely. Origanum hybridum died, and I'm convinced that winds, not cold, winter-kill plants.—M. EMERSON MAIN, *Westerly, Rhode Island.*

A Surprise in Squash

TO THE EDITORS:

The Open Column is always interesting, and here I find someone growing "highbrow squash (July, page 366)." Well, I never had that kind of squash, but some years ago I had a pumpkin vine climb up an Apple tree, all unknown to me until, late in September, the leaves having fallen after a winter blast, I was surprised to see a good-sized pumpkin hanging up in the air.

I have been raising Iris from seed for some years. At that time I had only a few, so I gathered the seed and planted them in shallow furrows in an out-of-the-way place and then promptly forgot all about them. It must have been two or three years later that I discovered some peculiar plants growing where I did not remember planting anything. I was about to pull them up when closer inspection moved me to let them alone. Later towards the fall they grew large enough to be easily identified, and since then I have made a practice of sowing a large quantity of Iris seed. But I never took the trouble Mr. Morton (page 356) has and yet, like Patsy, they just grow.—L. A. MALKIEL, *New York.*

As Yuccas Grow in Georgia

TO THE EDITORS:

Noticing the inquiry about Yucca gloriosa in THE GARDEN MAGAZINE for January, I am offering my observations. I prefer it to all other dwarf Yuccas for open ground planting. There is a difference in development of the foliage in individual plants of the family, some being more ornamental than others. While I had seen Yucca gloriosa growing wild on the islands off the coast of Georgia (especially Tybee Island near Savannah) I had not especially differentiated it from other Yuccas. In Kew Botanical Gardens near London, England, I observed a fine specimen, and wrote the late P. J. Berckmans at Augusta, Georgia, to obtain some Yucca gloriosa plants like the one at Kew. He replied that they grew wild on our coast, and that he had sent the one I observed to Mr. Nicholson of Kew. Doctor Trelease, while the head of Missouri Botanical Gardens, published a monograph on Yuccas, and suggested that Y. gloriosa was probably a cross between the common Flaccid Yucca of the States and the taller growing Yucca aloifolia.

While its presumed parent plants mature seed, I had never observed a viable seed on a gloriosa plant; probably because it does not bloom synchronously with the emergence of the Yucca-sella moth. I have endeavored to hand-pollenize no other species, except Y. aloifolia variegata, and all the plantlets resulting were without variegations.

The most beautiful of all Yuccas is Y. guatamalensis but it will not stand the winters of middle Georgia and the Carolinas. Several species of Palm that winter-kill when young clothe their trunks with fibers and become cold-resistant with age, but Yuccas that are tender when young appear equally susceptible to cold when old. Among the tall growing hardy Yuccas that may decoratively take the place of tree Palms the one to be preferred above all others is Yucca Treculeana.—BENJ. W. HUNT, *Eatonton, Ga.*

A FLOWER OF THE RARE DOVE TREE

"When stirred by the slightest breeze they resemble huge butterflies or small doves hovering among the trees." So Mr. E. H. Wilson describes the flowers of Davidia involucrata in his account of the dramatic discovery among the mountains of Western China of this elusive and "most beautiful of all trees which grow in the north temperate regions." ("Aristocrats of the Garden," Chap. XV).

It is exciting to learn that the Dove Tree has flowered for the first time in America! (See Mrs. Gibbs' letter at right.) It is named after the Abbé Armand David, a French missionary, who botanized in China from 1862-1873 and sent back the first report of it to Europe

The Dove Tree Flowers at Last

TO THE EDITORS:

During the latter part of May and the first week in June our Davidia involucrata flowered. I understand that it is really the first time that this tree has flowered anywhere in this country. Professor C. S. Sargent, Director of the Arnold Arboretum, visited my garden the summer of last year and expressed the hope that he might live to see the tree bloom, and I deeply regret that Professor Sargent was not able to be here when the tree blossomed this season. My gardener does not feel positive that this is the first year that it has produced flowers, but that is his impression.

The Davidia is from sixteen to eighteen years of age, twenty-five feet high, and perhaps six inches in diameter. The lower bracts were about five inches long and the upper ones three inches long. There were about three dozen of these blooms. The tree has had no special care—nothing more than other ornamental shrubs and trees, and seems fairly hardy, although Professor Sargent does not consider it so. The tree is growing in ordinary garden soil and it has had no special fertilizing.

Professor Sargent tells me that they have a tree at the Arboretum, and that Mr. Du Pont in Delaware also has a tree. I believe that the tree in my garden is the only one which has flowered. Thus far, we have not discovered any way of propagating it.—MRS. THEO K. GIBBS, *Newport, R. I.*

Delphiniums with Aphis but not "Blacks"

TO THE EDITORS:

Mr. Rea's article on "Our Best Blue Flower" (August, 1924) is of interest to those of us who are trying for the best in Delphiniums.

The climate and altitude (6000 ft.) here seem to suit them, and I have had some quite good ones—good in color, substance, and form.

Delphinium "blacks" is almost unknown here, but we are afflicted with a most persistent aphis, reddish brown, which ruins the plants if they are not constantly sprayed with some strong nicotine or whale oil soap solution. This is no fun when there are a few hundred plants to spray every other day.

Can any of your readers suggest how this pest may be prevented, or more easily destroyed.

This year I have Sutton's dwarf porcelain blue—really a true turquoise blue—with Rosy Scarlet Larkspur (Sutton's). They are really beautiful. The dwarf turquoise is very dainty as a cut flower with Clarkia Vesuvius. —K. N. MARRIAGE, *Colorado Springs, Colo.*

Is This the Record Regal Lily?

TO THE EDITORS:

Just to show you what will grow in Kansas, "the land of cyclones and grasshoppers!" I am sending a photograph of Lilium regale that carries twenty-nine expanded flowers all on one stalk. There were thirty-two buds but only twenty-nine developed. This is the fourth season the bulbs have been in our garden. Last year they were caught by a late frost and only one bloomed, and again this year they were threatened with danger when they were about eighteen inches high, so they were protected by burlap put around.

We also had Madonna Lilies in the same bed, and last year one carried twenty-four blooms; but this year they are not so good.

The Regal Lily bulbs were purchased from a local florist and grew stalks about six feet high and the perfume could be noticed fifty feet away. The bulbs are planted on a field that was made with ashes from the furnace about eight inches deep, and over that twelve inches of good soil dug in. Naturally, there is excellent drainage.—H. V. B. PICKERING, *Junction City, Kansas.*

—We are glad to present this evidence of the ruggedness of the Regal Lily. Complaint still reaches us from quarters that it is tender, miffy, and hard to grow. With us nothing could be easier, and, be it noted, the soil at Garden City is also exceedingly well-drained and not rich. Would-be growers should notice those two points.—ED.

TWENTY-NINE LILIES ON ONE STALK!

This Regal lily, growing in Kansas, on a field of ashes covered with twelve inches of good soil, seems to be a record breaker in the number of its blooms

Kansas Staunchly Befriended

TO THE EDITORS:

I was so thrilled when a whole number of your magazine was devoted to our section of the country. I hoped it would show the Easterners, who have gardens to dream about, that Kansas has something more than Sunflowers, Goldenrod, and the proverbial tornadoes—commonly called cyclones.

With joy I began an article on gardening in Kansas City, but the joy was short-lived. I have never wanted to live in Kansas City but I didn't dream it was such a horrid place as Mrs. Holmes says it is. The Sahara must be a veritable Eden in comparison, for there would be no wandering live stock there at any rate. I am Kansas born and bred with twenty-seven years experience to my credit last August and I have yet to be in a tornado.

This is the third year we have had a garden and though we are rank amateurs and there are times when we are mightily downcast, we had a lovely garden in the summer of 1923 and another this year. True the rain came in torrents in May and June of 1923 and the wind laid our Cosmos low and whipped the Larkspur shamelessly. But wind is good for plants, strengthening both stems and roots, and plants that won't grow outdoors belong in a greenhouse. July and August were scorching and city water could be used only sparingly —but that's all in the game. "If you think you're beaten, you are." Our Larkspur and Poppies made a lovely combination; the Zinnias, Petunias, and Marigolds were glorious all summer and the pink Cosmos and yellow Dahlias repaid the effort they cost and more. You see we rent and confine ourselves mostly to annuals.

The Clover died shortly and it almost broke my heart to see it go but up it came again next spring as thick and green as ever! Moss, it might be well to say, grew all summer under the Mulberry tree, not so much from dampness as from lack of proper soil conditions for other vegetation.

Gophers—yes, Dad brought me one when I was five—I don't remember what became of it—and I have seen them when I've been on the train going through Colorado, certainly never in the garden. We cultivate birds—scads of them. Moles we have and they are aggravating surely, but the man next door wages relentless warfare and may win some day. What's a bob-tailed mouse? I guess our cats ate all ours. Anyway, I never have seen one. I have smelled skunks but other than that I don't know any harm they have done. And once in a long while a poor frightened little cotton-tail comes here but never stays to eat. We live near the edge of the town and so see some of our wild life. Not any coyotes, though, and rarely any lions!

It's too bad to add more stigma to the name of Kansas. It seems to have its share and most of it is equally unwarranted. I went to college in Pennsylvania and know what Easterners think of the West, west of Pittsburgh. Things *will* grow here. Kansas always has more wheat than cars to ship it in. And with all the drought last year we had more tomatoes than we could use. The judicious use of the hoe does wonders. I have no sympathy for people who want a wilderness of flowers for nothing. Let them buy paper ones! A garden is like all good things of life—worth working for. The ups and downs of gardening are like the ups and downs of life—wonderful for the character.

Kansas isn't Paradise, it is true, but I don't doubt that Florida, Maine, and even lauded California have their drawbacks. They aren't Paradise either and it's no use making things worse than they are unless you want your achievement to loom larger—it doesn't *make* it larger, it only makes *you* smaller.

I am glad to know that Mrs. Pierce can grow Lilies at Topeka and that flowers bloom in July for Mrs. Frisch in Nebraska. Also, that North Dakota has a staunch friend. Even the devil should be given his due, so why not Kansas?

Now that I've said my say, I want to add that I enjoy THE GARDEN MAGAZINE greatly —almost as much as gardening, and I'd rather pull weeds and dig in the dirt than do anything else.—DOROTHY DOANE HAYNES, *Winfield, Kansas.*

What Shrubs Will Fit?

TO THE EDITORS:

I have a flower-bed two and one half feet wide and ninety feet long running along between my fence and walk. Out of this bed I have six climbing Roses carried on chains. After my Roses have bloomed a part of the bed looks cheap and poor. I have space for eight shrubs which flower after the Roses are gone, not over three feet high, and which will go in a width of two and one half feet. The space has full sun as I use a wire fence, and a heavy, sandy soil. These plants can be as large as the low Deutzias. What can I use?—J. R. DICKSON, *Columbus, Ohio.*

Roses For Fall Planting

PLANTED this Autumn Roses awake in their own beds next Spring. With their roots already established, our Roses, very early, make that strong growth so essential for a long blooming season. Then, too, you have more time to prepare the beds this Fall, while mellow soil and Fall rains help the roots to take hold. We offer you a series of delightful Rose surprises if you plant these:—

Twelve Real Rose Novelties—Tested and Proved
All in Strong 2-year-old Dormant Plants

America. Artistic glowing rose-pink flowers of delightful fragrance. **$1.50 each.**

Imperial Potentate. One of the finest new Roses. Brilliant rose-pink of pronounced fragrance and a perpetual bloomer. **$1.50 each.**

La Champagne. A glorious combination of chamois, yellow, apricot and peach blossom shades. **$1.50 each.**

Mrs. J. C. Ainsworth. Peach blossom petals edged mauve-white,—developing a crimson-pink centre—truly unique and lovely. **$1.50 each.**

Mrs. H. S. Prentiss Nichols. Brilliant deep pink with particularly attractive foliage. **$1.00 each.**

Mrs. Redford. A lovely orange-apricot combination, of pronounced fragrance. **$1.50 each.**

Padre. Coppery scarlet with yellow base. A great, free-flowering beauty for bedding. **$1.50 each.**

Souv. de Geo. Beckwith. Shrimp-pink tinted chrome yellow. Enormous flowers. **$1.50 each.**

Souv. de H. A. Verschuren. A blend of saffron yellow and apricot. Very fragrant. **$1.50 each.**

The Queen Alexandra. Vermilion, old gold and pure orange blended in exquisite fashion. **$1.50 each.**

Edel. White, with ivory shadings. Enormous, yet graceful flowers, sweetly scented. **$1.00 each.**

Felicity. A beautiful mallow-pink, petals edged cerise. Large, very double and fragrant. **$1.50 each.**

Special Offer:—We will supply (when in perfect condition to plant late in October or early November) Strong 2-year-old field-grown dormant plants, one each of the above twelve peerless beauties—a generous seventeen dollar value—delivered to your address for - ***$15.00***

Dreer's Autumn Catalogue is really a true index to everything fit to plant in the Fall. Besides a galaxy of heavy field-grown dormant Roses, it offers Tulips, Narcissus, Hyacinths, and other Spring-flowering bulbs, besides Perennials, Seeds, Accessories, etc. You'll find it a dependable free guide to Fall garden activity. Please write for it TO-DAY and mention this publication.

HENRY A. DREER, 1306 Spring Garden Street Philadelphia, Pa.

)warf Fruit Trees

arf Apple Tree
Scarlet Beauty
ee adjacent letter

Here is a letter from one of our enthusiastic customers

Read what he says

Van Dusen Nurseries,
Geneva, N. Y.

Gentlemen:

I received the three dwarf Scarlet Beauty apple trees and planted them April 25th. Pretty soon they bloomed and now they have all set apples. I am so pleased with them I thought I would tell you about their fruiting the first year. Everyone who sees them says they never saw anything like them. I will want more this fall.

Tennessee
June 2, 1924

Yours truly,
S. T.

Our customers send in pictures of these trees because they are pleased!

We Grow

arf Apple Trees
arf Pear Trees
arf Plum Trees
arf Cherry Trees
arf Peach Trees

They are big bearers of big fruit from small trees. They bear younger and need less room. They are the best trees for the home garden.

Our catalogue will tell you about them. A postal brings it to you.

THE VAN DUSEN NURSERIES
. McKay, Mgr. Box G, Geneva, N. Y.

Brand's Peonies

Acres of Beautiful Blooms

The above view of one of the Brand Peony Farms was taken the last week in June, 1924, a week after the National Peony Show at Des Moines, Iowa.

The World's Most Beautiful

Never before in our more than fifty years growing peonies have we had the unusually large assortment of these wonderful choice varieties we are offering this fall. Flowers from this stock, competing with those entered by all other growers, won the three highest prizes at the greatest National Peony Show ever held.

Brand's Peonies awarded Gold and Silver Medals at National Peony Show.
Brand's Peonies awarded Grand Sweepstakes at St. Paul Peony Show.
Brand's Peonies awarded American Peony Society Gold Medal at Minneapolis Peony Show.

You will want some of these, the world's most beautiful peonies, for your fall planting, therefore, write to-day for Brand's 48 page FREE catalogue of Peonies and Iris, giving varieties with full descriptions, and prices.

Brand's Big Peony Manual, which we consider the most complete and up-to-date work ever written on the Peony, gives the history of that flower, its culture and varieties. Price 35c, but that amount may be deducted from price of your order.

Growers of Peonies for More than 50 Years

THE BRAND PEONY FARMS, Box 23, Faribault, Minn.

A BIT OF PLANTING BIRDS LOVE

"The big leaves of this Butter-bur (Petasites officinalis) are often chosen by careful bird mothers for feeding places for their little ones in a rain. Sometimes it is a puffy imperious baby robin, sometimes a little fluff of a song sparrow, which sits softly rocking on a lower leaf, dry of foot and feather, under its great roof-leaf, while awaiting its mother's ministrations." So writes Mrs. E. E. Norris, the owner of this eighty-year-old garden at Brookfield, Mass., which was pictured in our March, 1924, issue (see pages 19, 38, 39)

What the New Morton Arboretum Means to the Middle West

TO THE EDITORS:

The May number of THE GARDEN MAGAZINE is to be congratulated in having printed something in the nature of a "news beat" in Mr. Eldredge's description of the Morton Arboretum now under organization at Lisle (Ill.) a small village near Aurora (Ill.) and about twenty-five miles from Chicago on the Burlington suburban lines, a forty-five minutes trip from the heart of the city.

No one hereabouts, so far as I can discover, had heard of this great project until Mr. Eldredge's article appeared. We all hope that this arboretum may soon be thrown open to the public, for there never was greater need for such an institution than in this section at the present time when there is such an intense growing interest in ornamental gardening and particularly in shrub and tree planting.

This is a department of gardening in which, it seems to me, the least advancement has been made because it takes considerable courage and enthusiasm to purchase shrubs or trees concerning the hardiness and vigor of which the buyer knows nothing and which may or may not live. This great tree garden would answer the questions that everybody wants answered, for there is an endless monotony to the shrub planting in this section: thousands of miles of the white monotony of Spiraea Vanhouttei in May, a little earlier the common Lilac when only one sight of the fine French hybrids would send them into the discard in nine out of every ten gardens. In summer the dingy Althea and the great dirty white wads of Hydrangea paniculata grandiflora; and you have the stock in trade prescribed by itinerant landscapers, better by far than no shrubs, but there is such a wealth of material that might be used if its hardiness and availability could be tested for public information and this is just the function that the Morton Arboretum can perform.

It is a piece of news most joyfully hailed by gardeners here. So far as I know there has been no other arboretum in the state in which we might study since the old arboretum at the University of Illinois, which flourished before Mr. Eldredge's time, and before they built so many buildings that they ruined the scenery. Before I left the university it had been partly destroyed to make room for the engineering and other buildings but it gave a good idea of the value of such a tree and shrub garden on a grand scale. The old arboretum was of only a few blocks extent and contained all trees native to Illinois. It introduced the Tulip-tree to popular notice in this state through the eloquent reference to "the Tulip-trees of Illinois" in many of the speeches of President Andrew Sloan Draper. I was one of the many hundred students who discovered the Tulip-tree at the University of Illinois through the old arboretum.

Experimenting with new plants, shrubs, and trees is interesting and fascinating; but I much prefer to have them die for somebody else! Shrubs and trees are expensive experimental material and their loss is keenly felt. With the great Morton Arboretum we could know before purchasing whether the trees shrubs we desired were suited to climate soil conditions in our gardens. This kn ledge should add vastly to the beauty of shrub plantings which are increasing dail all our cities and towns. The new arbore should begin its priceless bestowal of infor tion at just the time when interest in sh and tree planting is at the height of its deve ment in the Middle West.

It is too common an experience and too p ful a one for most gardeners—that of lo shrubs. I recall the dollars and grief th voyage of discovery among the Deutzias me only to learn that D. Lemoinei is the c reliable variety for this section, not even hybrids being hardy. The Morton Arb tum would have told us facts of that kind.

This is a great piece of news for West gardeners and the vast extent of the territ which will be able to depend on the findi of this test garden include a very substan slice of the U. S. A. The country aro Lisle is the prairie black dirt belt t stretches through the Midwestern sta often three feet deep before striking the c or gravel subsoil and ideal for the devel ment of shrubs. Then, too, there are glacial deposits of gravelly soil in this regi There is a variety of exposure and drain in this country sufficient to furnish almost condition required by the trees and shrubs.

The library, too, is a treasure of incalcula value to gardeners.—SHERMAN R. DUF *Chicago, Ill.*

A Word to ROSE LOVERS

LAST FALL, backed by the advice of the editors of *Garden Magazine* and other authorities, I urged you to plant my field-grown, hardened roses during October and November.

We then sold many more roses than ever before in a Fall season and the general success of our patrons was little short of phenomenal, practically all achieving a 100% success or very nearly so. The opinion is general, too, that blooming results this Summer have been much better than usually achieved with a Spring planting.

Our Fall rose price list and literature (sent on request) tells you in detail the decided advantages of planting our class of plants in the Fall.

The accompanying photograph, taken this Summer, of a section of one of our three rose fields (plants maturing this Fall), shows you the actual plants you will get.

He who procrastinates never gets anywhere—ACT NOW and revel in an abundance of roses of your own next Summer.

GEORGE H. PETERSON

Rose and Peony Specialist **Box 50, Fair Lawn, N. J.**

2228 Horton Ave. S. E.
Grand Rapids, Mich.
July 8, 1924

Just a few lines to tell you that the fine, heavy rose plants, including Hybrid Perpetuals, Hybrid Teas and Climbers, I bought from you last Fall have given us more roses than we ever thought possible. They have converted me to Fall planting, as they came through the Winter in fine shape and have given us hundreds of blooms the past three weeks and look as if they will bloom all Summer.

CHESTER KIEKINTVELD

Bluefield, W. Va., May 10, 1924

Notwithstanding the hardest Winter in six years, temperatures frequently below zero and no snow on the ground at the time, every rose plant is living and making fine growth. (NOTE: We sent Mr. Kingdon, last Fall, 15 Hybrid Perpetuals, 50 Hybrid Teas, 12 Climbers).

ARTHUR F. KINGDON

Stamford Hall, Stamford, Conn.,
July 9, 1924

Kindly send me a list of your field-grown roses for this Fall's planting. The 135 roses I bought of you last Fall, 125 of them being Hybrid Teas in 24 varieties, are doing wonderfully well.

MRS. MICHAEL J. HEALY

54 Prospect St., Woodfords, Maine,
July 10, 1924

The Hybrid Tea rose bushes which you sent me last Fall came through the Winter in fine condition and have been much admired by all my friends and neighbors. They have been wonderful.

GEO. D. COLLEY

A Cozy Crystal Garden

to protect your plants this winter

WOULDN'T it be delightful to own a dainty white greenhouse in which to keep, all snug and warm, the precious plants that have brought you so much joy this Summer?

Don't you think they would repay you by blooming more gloriously than ever? Nothing will cure the discontent of the long, dreary months like a crystal garden in which you may plant and prune and pluck to your heart's content.

Perhaps you do not realize how easily you may own a Callahan Greenhouse. The cost is low—about what you would pay for a garage or a small automobile. And it is an investment that enhances the beauty of your home and the value of your property.

Now, before Winter comes, is a good time to erect your Greenhouse. Let us send you The Greenhouse Book and prices.

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6 FINE SHRUBS FOR FALL PLANTING } $2.50

1 BUSH HONEYSUCKLE
1 DEUTZIA PRIDE of ROCHESTER
1 FORSYTHIA
1 SWEET SYRINGA
1 BUTTERFLY BUSH
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GLEN BROTHERS, Inc. Rochester, N. Y.

Glenwood Nursery—"Famous Since the Sixties"

The National Garden Association

Formed to promote the annual observance of National Garden Week

LEONARD BARRON, F.R.H.S., President

Honorary Vice-Presidents: J. HORACE MCFARLAND, MRS. FRANCIS KING, MRS. RUSSELL TYSON, MRS. THOMAS G. WINTER, MRS. SAMUEL SLOAN, MR. FREDERICK NEWBOLD, MR. ROBERT PYLE, MRS. JOHN D. SHERMAN.

Coöperating Societies: NATIONAL PLANT, FLOWER AND FRUIT GUILD; AMERICAN DAHLIA SOCIETY; AMERICAN IRIS SOCIETY; ONTARIO HORTICULTURAL ASSOCIATION; AMERICAN FORESTRY ASSOCIATION; WOMEN'S NATIONAL FARM AND GARDEN ASSOCIATION; WILD FLOWER PRESERVATION SOCIETY; NATIONAL HORTICULTURAL SOCIETY; THE AGASSIZ ASSOCIATION; THE SCHOOL NATURE LEAGUE; SOCIETY OF LITTLE GARDENS.

SINCE its founding in 1923, the National Garden Association has aided in the formation of garden clubs in every state and in hundreds of localities in those states. Equaling the number of these earnest requests for the Association's Constitution and Program, have come numerous letters asking for information as to just what a garden club is and of what benefit to its members or to the community.

Just what is a garden club? It is an organization of interested garden-enthusiasts whose every phase of activity necessarily makes for community beautifying. Some garden clubs are formed solely to permit of exchanging notes on their home gardens and having talks and illustrated lectures, etc. Even if they go no further than this it means added beauty in their own gardens and consequently added beauty in their town.

But no garden club ever *does* stop there. The loveliness of their special blooms makes them desire to hold a flower show. Outside contributions are solicited to make this instructive and interesting. At once the offering of prizes follows. The recipient of such prizes is given an added urge to grow even better and more beautiful plants another year. The interest of the entire community begins to center around this annual flower show. People are brought together—a better community spirit is aroused. Children are urged to form junior garden clubs and to have gardens. The garden club has aroused an interest in beauty—the whole town follows. Prizes quickly follow for the best-kept yard or the best-kept railroad station, or the greatest civic betterment plan, and the result is the whole town made lovely.

Where a garden grows, there must be a clean-up campaign; a clean-up campaign means a health campaign; better health in the town just naturally brings a higher standard of living, this in turn bringing better citizens who immediately turn to the beautifying of their homes and community. It is a magic circle with the garden club as the center and fountain head of it all. That is what a garden club will mean in any town.

As the officers of the Association look at the vast work that has been done by garden clubs throughout the country and visualize all that yet remains to do, they feel that a garden club is one of the most important, far-reaching, result-producing organizations that can be formed in any city or town. There is no limit to the activities of such a club. It is impossible for any garden club—even if it tried—to do anything but help the town to which it belongs. Flowers, trees, well-kept lawns and hedges must grow out-of-doors, fortunately, and their beauties may be enjoyed by every passerby. Even if a club does no more than inspire each member to make his own garden a spot of loveliness and charm, it has justified its organization.

ONE of the most important phases of the work done by garden clubs in arousing this community spirit is to make the small town socially sufficient. With recreation parks, community picnic-grounds, suitable places for rest and amusement, by developing spots of natural beauty and preserving places of historic interest, the small town need no longer look to the city for all of its pleasures.

This idea of rural parks is spreading with a steady definite plan and growth. One state has already recognized the value of play places and its legislature has passed a law establishing a boys' and girls' camp institute. This is West Virginia where, in 39 counties, training camps for young people have already been started. The new state camp became the crowning achievement. "In these county camps" says a Bulletin on Rural Planning, "boys and girls gather each year for instruction and to practice those activities that stimulate the head, heart, hand, and health."

For this state camp, the farm which had been the boyhood home of Stonewall Jackson was purchased. The house was gone, but the old mill still stands and here, at "Jackson's Mill" the new camp has been located. What has been done in West Virginia should be done in every state, and what has been accomplished in Amber Township, Michigan, should be made possible in every such community. Here they have purchased and maintain a community "picnic grove." Everyone helps, individuals as well as societies; the expense has been small in comparison with the results achieved. Rural picnics bring large groups of families together for programs and social intercourse—all of this making for a better community.

IN COVINA, California, the Flower Section of the Woman's Club gave Roses to the public park and books to the public library. At Springfield, Mass., the Longmeadow Garden Club gave and maintains a garden around the Home for Crippled Children. The Flushing, L. I., Club maintains a garden around the hospital. At Butte, Montana, the Garden Club has aided to make the tourist camp both serviceable and beautiful. At New Prague, Minn., the Garden Club has helped to establish a fully equipped amusement park, with swimming and wading pools, golf course, running track, and picnic ground.

In all such work, garden clubs become important factors. At one small town, the garden club had been addressed by a landscape architect from a neighboring city. When the rural park idea was being agitated, the conservative element held that the plot (an open field) was not naturally adapted and that to develop it would be too costly and "who would know how to do it anyway!" The garden club took counsel with the architect who sent a carefully worked out plan with estimated cost. This cleared up every objection and the park is being slowly developed according to his plan. So successful has this been, that a neighboring town has voted for a similar place and again a little garden club of only 25 members has shown the way.

No matter what the size of a town may be, it is large enough for a garden club to be formed there. And this is also true, that the smaller the town, the more need is there of such an organization to develop the possibilities of the little place. To aid in forming such clubs has been one of the most interesting of the many efforts of the National Garden Association. To each individual or group who desires to form such a club, we will gladly send a copy of our Constitution, By-Laws, and Programs.

NOW that we are a magazine for the house as well as for the garden, we also list some particularly helpful bulletins that may be had at slight expense. To order these—send the price in money (*not* stamps) to the Superintendent of Documents, Government Printing Office, Washington, D. C.

Bulletins for the Home Builder: Wall Plaster, Its ingredients, Preparation and Properties (15 cts.), Colored Wall Plaster (5 cts.), Minimum Requirements for Plumbing in Dwellings (35 cts.), Measurements for the Household (15 cts.), Materials for the Household (25 cts.), Safety for the Household (15 cts.), Recommended Minimum Requirements for Small Dwelling Construction (15cts.), How to Own Your Own Home (5 cts.).

National Garden Week for 1925 to be observed April 19th to 25th

BOBBINK & ATKINS

World's Choicest Nursery & Greenhouse Products Grown In America

Ask for Catalogs Visit Nursery

ROSES

AUTUMN PLANTING

"The Rose Lover's Opportunity"

Is the title of our beautifully illustrated new booklet describing a Collection of Roses that can be planted successfully in the Autumn, with a special price for the collection. Many of the illustrations are in color. As we now know and understand Hybrid Tea and other kinds of Roses, we realize more than ever the importance of planting them in the Autumn. In addition to "The Rose Lover's Opportunity" we would advise, if you intend to plant Roses, to ask for Catalog of American Grown Roses. It has 63 pages replete with illustrations and descriptions. 75 varieties are portrayed in color.

Peonies, Irises and Delphiniums

A complete catalog of Hardy Perennials, Peonies and Irises, Old Fashioned Flowers and Rock Garden Plants, beautifully illustrated in color and black. It contains an alphabetical table of Hardy Herbaceous Plants indicating flowering period, approximate height and color.

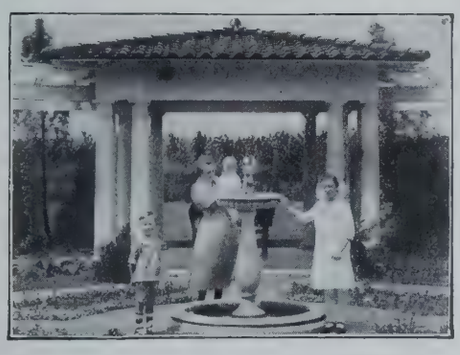
Pot Grown Plants and Vines

We are growing in pots, Heather in variety, Japanese Holly, Evergreen Hawthorne, Euonymus, in variety, Wistaria, Clematis, Hop Vines, Honeysuckle, Silver Lace Vine—all are described in our special pamphlet

Evergreen Trees, Shrubs, and Vines

An illustrated Catalog of Nursery stock; Evergreens, Evergreen Shrubs, Deciduous Trees, Flowering Shrubs, Hedge Plants, Hardy Vines, Fruits and House Plants. In your request for catalog, it is important to state definitely, the kind of plants you intend to plant.

BOBBINK & ATKINS *Nurserymen and Florists* **Rutherford, N. J.**



Fall Time is Garden Building Time

Pergolas—rose arbors—shelter houses—you can build them more conveniently these fall months than at any other time. The workmen, unhampered, do better work in less time. With foundation and building done, plants may be properly placed—you get a full growing season and added months' enjoyment of your garden.

Because we specialize in garden equipment, you are assured designs that are architecturally correct, designs that harmonize with the exquisite work of nature to give your home and grounds an air of downright luxury . . . , and the cost is less than if done by local carpenters. You get the full advantage of the low cost possible with our large production.

Only the finest materials are used in Hartmann-Sanders' products; all columns are the famous Koll Lock-Joint Columns. They will not—*cannot*—come apart. Send 30c for illustrated catalogue H-34, filled with useful suggestions. Catalogue H-47 on entrances and columns, 20c.

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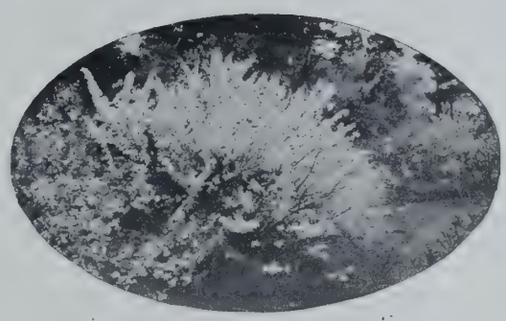
Koll Lock-Joint Columns—Pergolas—Rose Arbors
Garden Furniture and Accessories

Hartman-Sanders Entrances lend distinction to any home. Attractively priced.



Eight—Beautiful and Fragrant—

SHRUBS

For Fall Planting. A special collection of eight very desirable varieties on large, robust roots that may safely be planted at this season to give them a good start for next Spring's flowering.

A splendid value at the collection offer below—Priced individually as follows:

Spirea Anthony Waterer—continual bloom from June till October—2 ft. plants . . . . . Each $1.00

Spirea Van Houttei—Masses of pure white flowers, most beautiful of Spireas. 3 ft. plants. . Each .60

Lonicera Tartarica — Bush Honeysuckle fragrant pink flowers. Handsome foliage 3 to 4 ft. plants. Each .75

Weigelia Amabilis—Very vigorous. Beautiful foliage and rose colored blossoms. 2-3 ft. . . Each .75

Weigelia Rosea—Flowers later than Amabilis. 2-3 ft. . . Each .75

Hydrangea Paniculata Grandiflora—Splendid large flower heads—very popular 2-3 ft. . . . Each 1.00

Spirea Opulifolia Aurea—Ninebark, Large, vigorous, Abundance of fragrant white flowers in June 2-3 ft. .60

Philadelphus Grandiflorus—Very vigorous, large creamy white flowers and beautiful foliage 2-3 ft. . Each .60
Total . . $6.05

SPECIAL—The Entire Collection—a $6.05 value—**$5.00.** (Minimum Order $5.00)

Maplewood Road **Outpost Nurseries** Ridgefield, Conn.

Seasonable Bulletins on Evergreens, Shrubs, Perennials, Roses, etc.
Shall we put you on our mailing list?

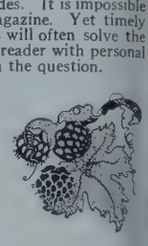
GARDENING FOR THE BEGINNER

THE MONTH'S REMINDER—OCTOBER

As to Time and Place: In gardening practice a date can only be approximated as seasons vary and local conditions will have some influence. Generally the latitude of forty degrees at sea level and a normal season is taken as standard. Roughly, the season advances or recedes fifteen miles a day, thus Albany would be about ten days later than New York (which is latitude 40). The latitude of Philadelphia is a week earlier. Also allow four days for each degree of latitude, for each five degrees of longitude, and for each four hundred feet of altitude. Latitude forty passes through Philadelphia, Pa.; Columbus, Ohio; Richmond, Indiana, Quincy, Ill.; Denver, Col.

How to Use This Guide: Suggestions as to the most important things of the month are given in this department so as to "remind" the gardener of the current duties. For routine details of such things reference should be made to standard handbooks and guides. It is impossible to make a complete manual of practice in each number of a periodical magazine. Yet timely articles will be found elsewhere in each issue, and references to back numbers will often solve the immediate question. Moreover, the editorial staff stands ready to help any reader with personal advice by mail. A self-addressed stamped envelope should be enclosed with the question.

Who Writes This: The advice and instruction in this department are the gleanings of many years experience in practical gardening matters by competent amateurs and others who have "been through the mill." The contributions are made from various sections of the country: for example, Mr. Jesse A. Currey contributes from Oregon; Mr. Theiss from Pennsylvania; Mr. Henry Gibson from Pennsylvania (formerly from New York); Mr. Sherman Duffy from Illinois; Mr. A. Kruhm from an extensive Eastern acquaintance; and, in addition, occasional notes from elsewhere and by the editorial staff and associated contributors of experience.



OCTOBER shows whether one is a real gardener or merely a flash-in-the-pan gardener. Any one can be enthusiastic over gardening in early spring. Only the real garden lover continues his labors into the autumn. Yet October garden labors are among the most important duties of the entire season. Especially is it important to clean up the garden. Pull up and destroy—preferably by fire—all plant remains, and thus make sure of exterminating lurking spores and seeds of disease. This is a great protection for plants in the coming year. The garden area, thus cleaned, may be handled in several ways, according to necessity. It is best not to leave the soil unprotected. Rye sown in the cleared spaces will afford winter protection to the soil and green growth to turn under for humus in the spring.

PLOW THIS FALL?

UNDER some conditions it may be best to plow the garden in the fall. If worms and grubs are very troublesome this may be advisable, for the plowing throws the buried insects up to the surface, where the cold kills them. This is one very good way to get rid of the white grubs that are the larvae of the June beetles.

When sod land is to be turned into a garden patch it should be plowed in autumn. The sods, if deeply covered, will be smothered and will rot. If turned under in the spring, the same sods would promptly shoot up stems, and the gardener would have to fight the grass half of the following summer.

Fall is an excellent time to apply manure to the garden soil which can be protected in this way as well as by a growth of Rye. The manure mulch can be plowed under in the spring. All the leachings will be in the soil, so that nothing is lost.

GATHERING CROPS BEFORE FROST

CABBAGES, Carrots, late Potatoes, and other vegetables for winter should be gathered before hard frosts come, dried thoroughly, and stored in a cool cellar. Lacking a good cellar, the gardener can bury his vegetables in the garden itself. Dig pits or sink barrels in the earth for this purpose. Use straw to cover these receptacles, and as cold weather comes on, earth must be mounded high over them. Dig ditches around all such storage places, to shunt away the surface water.

Late-grown Endive may now be lifted and stored in the root cellar. Two or three dozen plants can be stored in a very small space, for they should be packed close together. Cover the roots well with moist earth. As the plants blanch they can be used, thus extending the season of greens.

To supplement the Endive, Celery should be stored, and roots for forcing put into the root cellar. Asparagus roots, French Endive or Chicory, Udo or Japanese Asparagus, all are very helpful in extending the season of greens. In fact, by proper management, the home gardener can have greens the winter through.

Sweet Potatoes should be lifted and stored before cold weather; they need to be kept in a warm place. So do Pumpkins. A temperature of 55 degrees is a good storage temperature for the latter. Farmers sometimes keep their Sweet Potatoes in boxes immediately behind their kitchen stoves.

NEW PLANTINGS OF RHUBARB AND ASPARAGUS

RHUBARB and Asparagus plants can be set at this time. Do not plant the Asparagus too deep. The best plan is to dig a trench so that the Asparagus roots can be put down just a little deeper that the gardener's spade will go in digging; then the roots will not be injured by cultivation. But do not fill the trenches completely; put back into the trench only two or three inches of earth and fill in gradually in the spring, as the plants shoot up. The tender stems of young Asparagus cannot always get up through a great depth of earth, particularly if it is heavy. By trenching, one gets the roots deep enough, and by partial filling only, one does not bury them too deeply.

PUT OUT ONION SETS

SOME varieties of Onions are so hardy that they will withstand the winter, especially if slightly protected. If sets of these sorts be planted now, and mulched with manure, they will shoot up with amazing promptness in spring and be ready to eat perhaps before the remainder of the garden is dug. For this purpose Extra Early Pearl is a good sort.

FALL TRANSPLANTING OF PERENNIALS

DEEP-ROOTED perennials are best moved in fall. Shallow-rooted plants and those that bloom late, are better moved in spring. Some plants should never be moved in spring. The Peony is one of these. Before it can flower, it must make good root growth and become well established. If not set out until spring, Peonies can hardly be expected to bloom. The Peony is one of the few plants that are so hardy and so little subject to disease as to require scant care. Keep your plants hardy by keeping them vigorous, and bear this in mind in moving them. Nurseries often cut the roots to single eyes in dividing. When dividing your own stock, cut the roots so that each division has three to five eyes, rather than one. Plants will not spread so fast in this way, but they will be sturdier and better able to take care of themselves.

SAVE THE LEAVES FOR MULCHING

LEAVES are falling in October. These one always rakes up, but do not burn them—that is an economic sin! Pile them in an obscure corner and let them rot. They can be dug under in spring. Rotted leaves make one of the best of fertilizers. If they prove too acid, a sprinkling of lime will correct the trouble. Remember that rotted leaves and stems are the only manure nature uses.

Don't forget to mulch the evergreens that have been planted the current year. Alternate layers of leaves and earth make one of the most effective mulches by creating little pockets of dead air, which very effectually keep out the intense cold.

Straw is as good a mulch as can be had for Berries. It protects them nicely during the cold weather. Rake off in spring and tramp down between the rows. This will insure clear, grit-free Berries, for the rains cannot splash the soil up on the fruit.

BUDDLEIA FROM CUTTINGS

ONE of the easiest of all shrubs to start from cuttings is Buddleia magnifica. In a mild climate you can frequently get plants by just sticking cuttings in the ground. That is the way I propagate it in the Pacific Northwest but in some colder sections the plants, even old ones, cannot withstand the rigors of winter.

In such a climate it is advisable to start new stock and carry them along in small pots in the house or in a well protected coldframe, for they will grow nicely in a temperature as low as 45 degrees. In February the cuttings, having rooted, should be shifted into five- or six-inch pots and the growth pinched back once to make them branch freely.

In the latter part of May or early June, plant them out in the garden

(*Continued on page 140*)

Michell's Superb Darwin Tulips

gigantic, bright blooms on long, strong stems—make the garden a feast of color in May.

Darwin Tulips are growing more popular every year. Immense in size, exquisite in form and coloring, they are ideal for massing, bedding or border planting. Need not be dug up each year; separate colors in certain varieties may be flowered indoors.

Put them to the test. Let us send you postpaid a dozen of mixed colors for 75c; a hundred postpaid for $3.80; or a thousand by express at $28. For 250, or 500 the thousand rate applies. ACT PROMPTLY to assure immediate delivery; order from this advertisement.

Michell's Fall Catalogue Free

describes and illustrates Darwin Tulips of the better type (in colors). Also Hyacinths, other Tulips, Narcissus, Crocus, etc.—bulbs of the superior quality which have placed this establishment among America's largest importers of Dutch Bulbs, direct from the best growers in Holland.

Never has our stock been of finer quality than this year. Never have you had a better opportunity to secure such stock at more moderate prices than offered now, and here—at Bulb Headquarters.

HENRY F. MICHELL CO.

520 Market Street **Philadelphia, Pa.**

To insure quick and vigorous growth, plant Lilacs in the fall.

For Fall Planting
RARE NEW LILACS

An exclusive offer of the most beautiful named Lilacs in cultivation
grown on their own roots

The newer named Lilacs are wonderful examples of the plant breeder's magic, far surpassing common types. Ten years of intensive work is making the Elliott collection famous, not only for its great range of attractive forms, but also for the fact, rare in nursery practice, that every plant is grown *on its own roots*—not budded on privet or common lilac stock.

When you buy fine Lilacs, insist on hardy *own-root* plants. Budded Lilacs almost always die in a few years. *Own-root* named Lilacs grow in vigor and beauty for generations.

SIX TYPICAL NAMED LILACS

Distinct in color, profuse in bloom, lovely in form and fragrance.

Charles Joly. Heavy clusters of rosy purple.
Villosa Lutea. Dainty pink; late flowering.
President Carnot. Beautiful pale lilac.
Miss Ellen Willmott. Double pure-white.
Alphonse Lavalle. Heavy double lilac.
Charles Sargent. Violet mauve. Superb.

SPECIAL OFFER { Good strong plants *on their own roots* One each of the above, 6 in all, } **$10.00**

(Single plants $2.00 each)

Note: Our stocks of these varieties are limited and this special offer is made with the understanding that we may in case of necessity supply other named varieties of the same color and equal merit. Order now.

Catalogue Free

ELLIOTT NURSERY CO.

558 Magee Bldg. **Pittsburgh, Pa.**

You Can't *Buy* Berries Like These

You Must Grow Them Yourself

—and it's easy if you get the real nursery grown blueberry plants. Yes, old fashioned blueberries—just like Dad had on his old farm down East."

The joy of growing, picking and eating blueberries from your own land—the pride of offering them to your guests—only those who know it can appreciate.

The Mayo Nurseries offer sturdy blueberry plants grown in the heart of the Berkshire Hills. They are hardy, rapid growers and heavy yielders, bearing usually the first year—not the ordinary small seedy huckleberry but large full fleshed *blueberries* that taste—well, *delicious*.

A corner of your ground can be filled with blueberry bushes, a pleasing spectacle with their brilliant foliage reddening the landscape till late frost.

Plant Now—Pick Your Own Next Summer

Raspberries—Yellow, Red, White and Black—new varieties that a few words cannot attempt to describe.

Currants—on charming little trees—an ornamental novelty that will yield heaps of clean, delicious red fruit.

Grapes—Extra fine Bearing Age vines with heavy root systems and fruiting canes for quick results.

Fruit Trees—Peaches, Pears, Cherries, Plums, Apples and Quinces with wonderfully developed fibrous root-systems. These are well grown Trees—soon to bear fruit.

Plant our super size Fruit Trees and Berry Plants this Fall and *gain* a year in Results—Fruit on your table a year sooner. Don't lose an entire year by waiting until next Spring, but *Plant Now*.

Our New Fall Fruit and Berry Catalogue

"Make the Indian Summer Golden," beautifully illustrated in colors now ready for gratuitous distribution. Write for it.

This catalogue offers a selection of fruit trees and berry bushes proven to be the most satisfactory because of their hardiness against climatic changes, prolific yielding, delightful quality of fruit and early bearing.

Mayo Nurseries, Inc.

Nurserymen and Landscape Architects

908 Ellwanger & Barry Building, Rochester, New York

Nurseries at Rochester, New York, and Southwick, Mass.

(*Continued from page 138*)

and in August they will reward you with a long blooming period and furnish you with beautiful, fragrant, lilac-colored flowers, most excellent for decorating. Cuttings grown this way last year were more than four feet tall this summer and some of them carried as many as forty flower spikes. [In THE GARDEN MAGAZINE & HOME BUILDER gardens at Garden City (L. I.) volunteer seedlings crop up here and there. Frost cuts the plants to the ground but the roots live on. *Ed.*]

The Indoor Garden

FROM time to time friends appeal to me for advice about Ferns they have growing in the house and with which they are having trouble. Nine times out of ten I find upon investigation the trouble is due to improper watering. There is a very simple test by which you can tell whether or not the soil around the Fern is wet enough. Hit the pot both near the base and near the top with your knuckles. If it gives forth a hollow sound it is a sure sign that your plant needs a good drink of water. The best way to give that is to immerse the pot in a bucket of water for ten minutes and then when you take it out, lay it on its side until the surplus water has drained off. Really, the best plan is to water your Ferns regularly, seeing that the soil is always moist and never let them get so dry that the pot sounds hollow when tapped.

MICHAELMAS DAISIES FOR INDOOR DECORATION

THIS fall I have been enjoying one of the most satisfactory decorative flowers it has ever been my pleasure to have growing indoors—the Climax variety of the Michaelmas Daisy or hardy Fall Aster. Last spring when dividing some clumps of this satisfactory perennial I stuck three of the outside cuttings of a clump in a six-inch pot filled with ordinary garden soil. I plunged the pot in an off corner of the garden and saw that it was watered. Each one of the cuttings grew and in September I dug up the pot, moved it into the house, gave it water and it has flowered wonderfully well. Try it, if you want a tall flowering plant to decorate a corner in the hallway in the autumn.

A MID-WINTER SUPPLY OF SWEET-PEAS

THERE is scarcely any flower which will give more satisfaction next January than Sweet-peas grown under glass, and if you are one of the fortunate persons who own a hothouse, you will be able to enjoy these flowers when the ground is covered with snow. Sweet-peas need 90 days to bloom therefore if you want flowers in January sow seed early in October. Prepare the soil carefully, and see that it is well fertilized. Make sure that your vines will have at least eight feet of headroom. A common error of amateurs in growing Sweet-peas under glass is to plant them close to the outer wall, where usually there is not sufficient room to give the vines the best of opportunity to grow. Give them plenty of headroom. If you raise the vines from beds in the floor see that the beds are well underdrained.

The young plant or seedling should have good care. An excellent plan is to first plant the seed in four-inch pots, about eight seeds to each pot. When these germinate, thin out until there are only four to a pot retaining those which exhibit the most vigor. When about four inches high, transfer these vines to their permanent bed in the greenhouse. It is quite essential to watch the seedlings after the first thinning of so they do not become pot-bound. If this should happen, cut off the top growth and the new shoots from the bottom will produce good flowers. Do not crowd. Plant about eight inches apart; and when growing and after they are in flower they must never suffer for water.

GETTING RID OF RED SPIDER

IF RED spider gives trouble in the greenhouse where you grow Chrysanthemums, there are various sprays which will do a lot of good, but many amateurs fail to take steps to aid the spray. A practical thing to do when Chrysanthemums are bothered with red spider is to pull off all the bottom leaves of the plants, say up for five or six inches, depending upon the length of the stem. This will leave the bottom part of the plants open so that the spray, when shooting up from underneath, will do the most good. Even if you are not troubled with red spider, the removal of the lower leaves is often a good thing, as it permits a freer circulation of air.

SPANISH IRIS FOR EARLY SPRING BLOOM

IF YOU are considering something to grow in your greenhouse to come into flower next spring after the Tulips are on the wane, try the Spanish Iris. You will meet with success if your greenhouse is so arranged that the temperature can be well regulated and a low temperature kept than is required for many plants. It will not do

(*Continued on page 142*)

HOLLAND BULBS

Darwin, Cottage, and Early Tulips, Hyacinths, Narcissi, Crocuses, etc., of exceptionally fine quality. *Order early while assortment is complete.*

PEONIES

Best varieties in strong clumps.

PERENNIALS PHLOX and IRIS

in Vigorous, Field-Grown plants. New and choice sorts.

It is planting time now.

Send to-day for our Catalogue.

FRANKEN BROTHERS, Deerfield, Ill.

Lovely Wildlings from the Carolina Mountains

IN the Blue Ridge Mountains of North Carolina, 4,000 feet above sea-level, is the greatest natural garden spot of the East. Here, hand in hand with Nature, I have made it possible for you to reproduce, on your own grounds, the floral splendors of the Blue Ridge.

"The unique hardiness and beauty of the Mountain South" are in this charming collection of flowering size plants—

Lilium Grayi, orange or brownish.
Lilium superbum, bright orange.
Trillium grandiflorum, white to rose.
Stenanthium robustum, long white flowers.

12 Plants (3 of each) ***Flowering Size Sent Postage Prepaid for*** ***$2.00***

For thirty-two years I have specialized in the best American plants; by scientific methods have developed them to even greater beauty, and brought them within the reach of garden-lovers everywhere.

My catalogue of rare trees, shrubs, ferns, laurels, rhododendrons, hollies, and other treasures, is yours for the asking.

E. C. Robbins **Pineola, North Carolina**

Glass Gardens

Glass Garden equipped bungalow of F. V. Anderson, Cleveland, Ohio

Mrs. Anderson's Idea And What Came of It

IT WAS all very nice, keeping house, getting meals and darning socks for my husband, but when Winter came and shut me in, found myself growing restless for something. I didn't know what.

It was to my window flowers that I always turned for solace. They had a way of setting me right again, and restoring my contentment.

So that's how we came to have our snug little greenhouse. Nothing that we have spent our money for, since building our own home, has approached it, in the good cheer and happiness it unfailingly supplies. Can't help but wonder why more don't have their own little glass enclosed garden just like ours."

To which, let us add that you are welcome to our printed matter about the cheer giving, contentment producing glass gardens we build.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

Eastern Factory Irvington, N. Y.		Western Factory Des Plaines, Ill.	Canadian Factory St. Catharines, Ont.
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Buffalo Jackson Bldg.	Montreal 124 Stanley St.	St. Louis 704 E. Carrie Ave. Greensboro, N. C.	Toronto Harbor Comm. Bldg.

The Gospel Truth About Peonies

That's what I am tempted to call my "Unvarnished Facts" edition of "Tips and Pointers for Beginners with Peonies." It's *neither* a treatise nor a catalogue but an "honest-to-goodness" experience story told in plain English about the hundred varieties of Peonies I grow.

Too expensive a book for broad distribution. Just send me 25c for it, which covers less than half of cost per copy. If, after reading it, you do not feel it's worth its cost, return it and I'll reimburse you. Otherwise you may deduct 25c on first order.

HENRY S. COOPER

Peony Fan

KENOSHA WISCONSIN

(*Continued from page 140*)

grow this Iris in a greenhouse where the temperature is for tropical or semi-tropical plants; the Spanish Iris does not like too much heat. It does best around 40 to 45 degrees. I have seen some excellent Spanish Iris grown in the solarium of a residence. They can be grown in window-boxes or on benches in a greenhouse, and I have a friend who is quite successful in growing them in the ordinary eight-inch florist's pan, planting six bulbs to a pan. They can be had in a number of colors ranging from white, through yellow, to deep purple.

October Activities in the California Garden

CONTINUE planting bulbs and sowing seeds of perennials for next year, also Pansies, Sweet-peas and Marigolds for late winter blooming. Sow seeds of native wild flowers and scatter seeds of California Poppies; the roots are perennial and the plants will sow themselves. Also sow seeds of Honeysuckles or set out young plants; the Japanese or Chinese kinds are best adapted to California.

Set out young plants of Primroses, Cineraria, and Pansies. Plant Anemones for winter and spring blooming; soak in water and plant in the sun, covering the crowns with one-half inch of soil. Japanese Anemones may be transplanted as soon as they have bloomed.

Start fresh Pentstemon plants from seed or cuttings.

Plant Japanese Iris in rich soil and in a sunny location, and one foot apart. They require much water, and if the beds are sunk below the level of the garden they can be flooded and will retain the moisture.

Carnations raised from cuttings made in July may now be set out in beds. Plant one foot apart and add ashes and soot to the soil for color and stiffening of the stems.

Begin pruning deciduous shrubs and trees.

Tulips You Can't Go Wrong On

CONFRONTED by lists of Tulips running into the hundreds, the gardener desirous of making the acquaintance of this showiest of all garden material has a puzzle before him. So there is a brief selection of "you can't go wrong" varieties which will give a characteristic survey of the various groups. For a small place, the late or May-flowering varieties prove most satisfactory.

At the head of the Single Earlies I place DE WET, a huge gorgeous orange and yellow Tulip of unusual height for a single early; SARAH BERNHARDT (also known as Le Rêve), a handsome Tulip of blended rose tones should be added, and PRINCE OF AUSTRIA; COULEUR CARDINAL for the bright reds; PROSERPINE for a silky rose, and COTTAGE MAID for delicate pinks will prove satisfactory.

The vast variety of shades among the Darwins is a constant fascination. MR. FARNCOMBE SANDERS, one of the finest of the bright-colored Darwins, a mingling of scarlet and rose, should be included in every list. The huge PRIDE OF HAARLEM, a rose-red, belongs in any select list; WILLIAM PITT for a dark red; CLARA BUTT for clear pink; PETRUS HONDIUS for clear rose with no trace of purple, a singularly brilliant Tulip; FAUST for the rich dark purples; GRETCHEN for dainty flesh pink; DREAM and REV. EWBANK for the lavender and violet shades; and BARONNE DE LA TONNAYE for the rose shaded type, will give a beautiful selection.

In the Cottage group, GESNERIANA SPATHULATA MAJOR, one of the finest of all red Tulips, cannot be omitted. For yellows, rich and deep, try AVIS KENNICOTT, deep yellow with a black center; or MRS. MOON with light center. MOONLIGHT, a big oval Tulip of luminous pale yellow is always striking; and MISS WILLMOTT, of a similar yellow with a different shape, is also fine. SCARLET EMPEROR is a wonderful Tulip, justifying its name. INGLESCOMBE PINK in salmony tones is an extra good Tulip. EMERALD GEM has beautiful orange tones with a peculiar mingling of rose. The beautiful art shades of buff, cream, pink, and lilac are beautifully shown in THE FAWN, JOHN RUSKIN, one of the finest of this class, and FAIRY QUEEN.

The Breeders, notable for their shades of bronze and brown, are now the fashion. BRONZE QUEEN, GOLDEN BRONZE, JAUNE D'OEUF, LOUIS XIV, and DOM PEDRO are good samples of these fascinating tones. VELVET KING, a huge dark purple is a good type of the dark Breeders. LUCIFER shows the brighter tones. PRINCE OF ORANGE deserves a place, and MME. LETHIERRY shows the pink shades of this class.

The striped Bybloems and Bizarres can be bought in mixtures to good advantage.

Tulips may be planted as long as the ground can be worked. I have planted them as late as Thanksgiving Day with good success. If the soil is heavy, drop a handful of sand beneath the bulb. Plant five inches deep from the top of the bulb, six inches or up to eight inches apart for the late Tulips. Plant six inches deep in light sandy soil.

GARDEN MAGAZINE
& HOME BUILDER

Vol. XL, No. 3 NOVEMBER, 1924

Charles Burrows, Photo

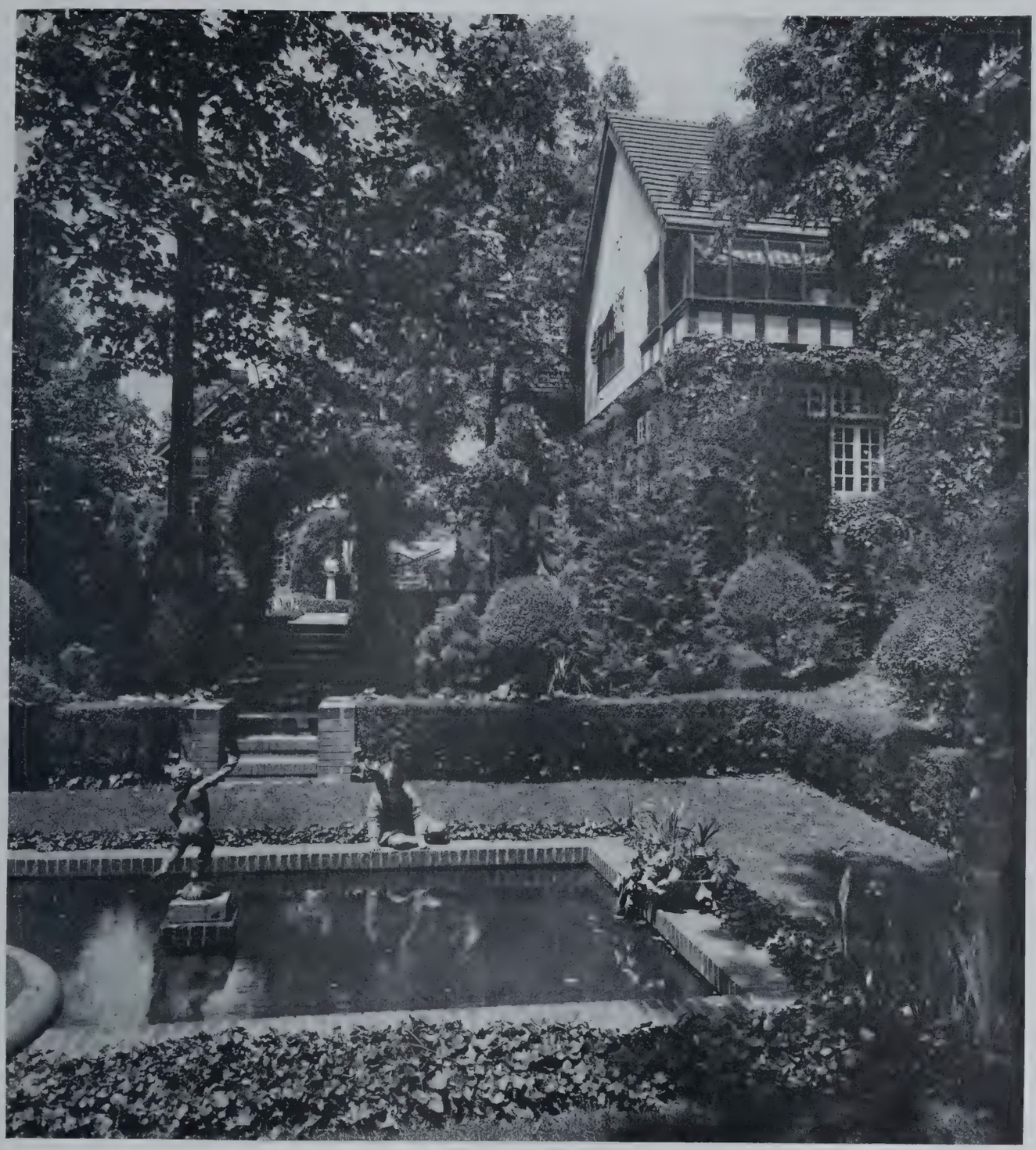
"Of that deep porch and ample shade;
There let no hurrying step invade,
Troubled or anxious or afraid."
Arthur Willis Colton

A direct inheritance from old Spain, the patio is one of the pleasantest features of the Spanish type of architecture so much found in Florida and other semi-tropical sections of our country. Here at Mariada, the Palm Beach home of Mr. Leonard M. Thomas, the courtyard adjoins the dining room

A. Jackson Co., Photo.

"A garden on the rearward side
Shall hold some flowers of civil pride
And some in meekness dignified."
Arthur Willis Colton

"The passing of the big old homesteads has brought about conspicuous changes, not so much in garden practice perhaps as in garden procedure. That is, many of the ancient materials are used but they are handled in an entirely different manner" says Warren Wilmer Brown in his very illuminating article on "Newer Gardens of the 'Near South'" (see pages 193-195). Herbaceous walled garden in the new manner at the home of Mr. Valentine S. Doebler, Guilford, Maryland; H. Clay Primrose, Landscape Architect



Thurston Hatcher, Photo.

"A little pool, a little child,
And green things smiling to the sun—
A resting place for weary feet
When day's work is done."

Amer Pindar

Steps enticing the feet through the quaint formality of Privet and Deodora Cedars down to a pool, like an opal with its shifting lights and shadows—azure, emerald, flame and silver, as clouds lie overhead and the sun rides to his setting—echoing, too, the green beauty of the garden. The pool is fringed by a very small-leaved Russian Ivy and occasional clumps of Japanese Iris. Clipped Privet (Ligustrum amurense) forms the background hedge and arch. Home of Mrs. Arthur I. Harris, at Atlanta, Georgia

NEWS AND COMMENT

BEAUTY IN THE SMALL

THAT the small and inexpensive must necessarily be crude and ugly is an obsession that seems to be an all too common opinion. It may truthfully be called an obsession because, of course, a moment's thought will convince any one that there is no such relationship.

While it is true that a great many cheap houses and cheap gardens are not attractive, it is also true that some of the most beautiful details of design and construction and planting can be found or may be introduced into little odd corners, if one only has the will. After all, it is the will to possess that is the limiting factor.

It is somewhat unfortunate that the minds of many people react immediately into the creation of the large environment whenever they see a beautiful detail. This is the thing that the GARDEN MAGAZINE & HOME BUILDER is trying to present in its true proportion. The small need not necessarily be ugly, but it may take a little more thought and a little more care in combining the other features because the scale of opportunities is so limited. All the more reason, therefore, that consideration be given, for, after all, the best is none too good for any of us, even the least obscure.

BURNING UP BANK NOTES

THE seasoned gardener of course knows better than to burn up the fallen leaves; rather he gathers them into some odd corner to rot and make a "compost." The wisdom of the practice is easily demonstrated, yet there are thousands of newer gardeners who prefer extravagant cleanliness or neatness of the moment at the expense of a better garden next year. Don't burn or waste the fallen leaf or other maturing vegetable matter. The fallen leaf has lately been studied by a French observer who finds that an appreciable quantity of nitrogenous material remains in it. Nitrogen is the most sought, most elusive, and most demanded element in the food of plants. About half of the leaf's contents is returned to the plant before it falls, a quarter is used up by the dying leaf as food for itself. The residue falls to the earth, there normally to feed the ground. Why then sweep up, burn, dissipate such richness, and then replace it by costly chemicals and manures?

"V. M. H."

READERS have doubtless noted these initials following the name of the author of the fascinating plant articles published in THE GARDEN MAGAZINE from the pen of E. H. Wilson, Asst. Director of the Arnold Arboretum, and the greatest living plant scout. Just what they mean may not be generally understood.

During the Victorian Jubilee, held in celebration of the sixtieth year of the reign of the good queen, arrangement was made by the Royal Horticultural Society of England to confer sixty medals, each to commemorate the doing of some fine thing in horticulture, and the recipients of these medals were entitled to add the letters "V. M. H." to their names. Later, when Queen Victoria died, the number of medals was increased to sixty-three, covering the years of her reign. Mr. Wilson's medal is the only one held in America.

Readers may have noted that Miss Ellen Willmott received one of these medals, and that she uses the magic initials, denoting recognition of her exceptional accomplishments in horticulture. In fact, all of these medals were bestowed in an equally worthy fashion, it is believed.

Now what have we in America parallel to this honor? What do we do to our great workers? What honors or degrees in what colleges or institutions are available to them?

Examination shows, for example, that Dr. Liberty Hyde Bailey, surely the most notable figure in American horticulture, is an LL.D. of several universities. Also, he earned the degree of Bachelor of Science in his first college, Michigan Agricultural. We find that Dr. Britton is such because he is a Doctor of Philosophy, and also a Doctor of Science. If we consult "Who's Who" and chase up other men prominent in horticulture, we find that most of our horticultural workers have never been honored or, if honored, have had to stagger around under philosophical or legal degrees.

America of all lands in the world is the land of horticutural opportunity. With its breadth of climate and soil, with its teeming millions, its great natural resources, with its enterprise, it is coming to do things horticulturally. The pioneers in the work, those who have benefited the world as well as the nation through their often wholly unrewarded efforts and achievements, seem never to have fallen under the glance of a great educational institution, despite the fact that the wealth grown in and on the land is the only true wealth in America or elsewhere, and that commerce and manufacture and professional life merely move about and concern themselves with natural resources, while agriculture and horticulture actually grow the gold that adds to the real wealth of the land.

Why cannot some great institution establish honors that would fit horticultural achievements? Would it not stimulate young men to study and to research if it were possible thus to achieve honors? Would it not be as well if institutions which now sprinkle LL.D's all over the land in honorary recognition should also confer upon men distinguished in horticultural research or accomplishment some appropriate recognition?

We have great agricultural colleges, probably the greatest in the world. Stores of learning are made available, and great teachers are at hand. Is it not time some plan was devised whereby the science and the practice of plant culture in all its aspects could be so recognized through honor and preferment as to add that as an inducement to young men and young women?

We are not proficient in Latin terminology, and have therefore no basis of suggestion, but we ask that those who believe it is proper thus to honor a man who benefits the world, who does things for its betterment through plant life, come forward with propositions which might lead toward the establishment of degrees in horticultural endeavor by some several of the great educational institutions of the land.

J. HORACE MCFARLAND

A BOOK OF AN AGE

IN THE regular routine of book reviews, when many unrelated volumes are of necessity all treated at one time, it is quite likely that the more significant book sometimes gets somewhat slighted. This has possibly happened in our own columns with reference to "A Manual of Cultivated Plants" recently reviewed. This is one of the out-of-the-ordinary publications that occur only at infrequent intervals and we are thankful to a correspondent in California for calling our attention to this patent fact. On the lines of Gray's "Field Book of Botany" this volume does for the ordinary cultivated plants what Gray did for plants in general fifty years ago. It is a remarkable compendium of information and, perhaps, more nearly than any other single book will fill the need of the man who wants, as was recently the case, "a small book that contained directions of all cultivated plants." Our correspondent wanted one that had also illustrations but, obviously, that would be an impossibility. Prof. Bailey's manual runs to 850 pages, small type at that, and even then such legitimate criticism as can be offered would be on things omitted. The "Manual of Cultivated Plants," is a really worth-while book for everybody who wants to know about plants that are grown in our gardens.

THE DAHLIA PRIZE POEM

ON OCTOBER 1st at the close of the Competition nearly 1000 entries had been received. This material will be judged as rapidly as possible and announcement of the award—a $50. cash prize offered by Mrs. Charles H. Stout—published in an early issue. Mr. Christopher Morley, Prof. John Erskine, and Mr. Frank E. Hill have generously consented to serve as judges.

A HISTORIC HOMESTEAD ON THE RIVER ASHLEY

Built about 1750 by the Hon. Henry Middleton, this beautiful old homestead is pridefully known as Middleton Place in the annals of South Carolina. Much has been done in recent years by its owner, Mr. Pringle Smith, to restore the original loveliness of garden and grounds *(see page 166)*

STORIED GARDENS OF THE OLD SOUTH

ANNIE L. SLOAN

Photographs by Melchers Studio and Roger B. Whitman

Chinese Camellias and Azaleas that Have Graced Carolina Homes for More Than a Century—France as a Pioneer in Early American Gardening

HEAVY-RIGGED, slow-sailing ships ploughing their way through uncharted seas brought to the virgin shores of Carolina in the late years of the seventeenth century adventurous colonists of various nationalities, diverse morals, and unequal fortunes. Among such were a goodly number of Englishmen of gentle birth and genteel education who made new homes for themselves upon the banks of the Ashley and Cooper rivers, the earliest settled quarters.

With many of these English colonists gardening was a deeply rooted taste inculcated in the mother country and extensively indulged in the Province where fortunes were easily increased or amassed, where, also, the fertility of the soil and mild climatic conditions encouraged landscape gardening and elaborate horticultural experiments.

Many names, many traditions, but alas, few gardens survive to weave with blossoms of myriad dyes their own story in language gladdening to the eyes of men. The first historic garden in South Carolina of which there is adequate record was that of Mrs. Lamboll about 1750, corner of King and Lamboll streets in old Charles Town.

Record and tradition relate that in these early days the then English fashion of gardening was favored, formal gardens predominated, there was elaborate use of hedges of Box, Holly, Cedar, Evonymus, Pittosporum, Arborvitae and so on.

Many foreign plants were imported as commerce flourished during the infancy of the colony, making the floral treasures of the East available, as well as rare and valuable fruits and food plants. From India, China, Africa, southern Europe, the isles of the sea, were brought the Pride of India, Mimosas, Varnish trees, Ginkgo, Tallow Berry, Lotus, Bengal Roses, Oranges, Pomegranates, Japan Plums, Oleanders, Cape Jessamines, Calla Lilies, Lemons, Figs, Sesame or Béné, Sugar-cane, etc. Lilacs, Laurustinus, Roses, Laburnums, sweet Violets, etc., from England added their fragrance and beauty. From France its vines, its royal Iris and Roses of Provence; from Italy, Myrtle, Laurel, and Violets of Parma; from Holland its wealth of bulbs. From all far lands, across strange seas, thousands of plants, descendants of which still survive in old gardens to-day. Last of all from China and India the wonderful Camellias and Azaleas which continue to

A GLIMPSE OF THE GARDENS AT MIDDLETON ON ASHLEY

Azaleas in full flower; Live Oak, fantastically bearded with Spanish Moss, and other characteristically Southern planting in this garden swiftly nearing its two hundredth birthday

glorify the earth with their marvellous brilliancy and variety.

ABOUT 1786 the monarchical government of France sent out the celebrated traveler and botanist, André Michaux, who established a botanical garden some ten miles from Charleston, into which he introduced a number of curious exotics and, in addition, a great variety of American productions. This garden has unfortunately gone to ruin, though much of the material has been transplanted and is growing elsewhere. With the assistance of his son, a young man, François André, the adventurous scientist carried on his experiments and cultivation, making various and difficult trips through Georgia, Florida, Kentucky, the Alleghanies, the Bahamas and other isles of the sea in search of specimens. Seed and plants were shipped to France from time to time.

Here within sight of the present S. C. railroad track, Michaux lived for the greater part of ten years, returning to France in 1786, and later extending his travels to Madagascar where he died. Michaux brought to this garden, among various foreign trees, the Ginkgo biloba or Maidenhair-tree of China, also the Mimosa and Varnish trees (Sterculia) all of which have become quite widespread through the state. In 1802 the place was sold by order of the French government, all of the available nursery stock being shipped to France.

Visiting recently, for the second time, Michaux's garden, we found it difficult to realize that this overgrown tract had been the site of so great scientific experiment and industry—an overgrown pile of brick adopted by Cinnamon Ferns and nameless weeds represented all that was left of the ardent Frenchman's hearthstone. Several magnificent Magnolias, a splendid Cedar, and some Rock Maples towered above the encroaching forest where hopes, ambition, and science had once builded so bravely.

Among the various Chain, Royal, and Cinnamon Ferns carpeting the ground that sloped down to the overgrown ponds, we discovered a patch of Gladiolus, some small Rose bushes, Bridal-wreath sprouts, Calycanthus, Mock-orange and Dogwood. On a former visit we discovered several Crêpe Myrtles, also a specimen of the Climbing Hydrangea (H. petiolaris).

THE two old historic gardens that have survived storm and stress, two devastating wars and the lean and cramped succeeding years are the most famed in the state, probably the most beautiful in America—Magnolia on the Ashley and Middleton Place farther up the same river. Magnolia on the Ashley was inherited by the Reverend John Grimke Drayton who conceived the plan of creating the fine garden. The first plants of the Azalea indica were planted by Mr. Drayton in 1843 and there is also a vast rare collection of Camellias.

One passes down the long broad walks between tall hedges of Flowering Quince or Azaleas in season, interspersed with other lovely things, fleecy fringes of the Ash, graceful garlands of Bridal-wreaths, Roses, and Jessamine, and foreign plants. In the air is blended the fragrance of honey-sweet blossoms that climb and trail and creep at one's feet; the breath of tall sun-kissed shrubs, the breath of small dewy hidden things.

Then one reaches the slender bridges, spanning silent black waters sleepy and breathless, trailing glories of Cherokee Roses and Wisteria, mirroring themselves in the stilly depth; brilliant crimson and pink Azaleas blending in jewelled reflections. Standing all sentinel around the borders, silent Cypress trees; Violets, purple and white; Ferns and wild sweet things growing along the level

banks. A splendid Oak, branches far-spreading, heavily hung with misty Moss, small open glades belted in glowing bloom through which one catches vistas of lawn and handsome avenue beyond. Over all an intangible charm, a hazy atmosphere, a sun-wrought iridescent texture of blended purple and rose and white, being of the substance of which dreams are made.

The property, containing originally nearly two thousand acres, has been in the family for more than two hundred years, but it is to the esteemed Rev. John Grimke, who for health's sake retired to this plantation, that we are indebted for the magnificent garden of to-day.

MIDDLETON PLACE is finely situated on rising ground, overlooking a bend in the river. The house, replacing an older one, was built about 1750 by the Hon. Henry Middleton. The wings are said to have been added, and the gardens, terraces, and ornamental water laid out before 1755, much as they are to-day, by an English landscape gardener.

It was kept up by a succeeding Middleton, "The Signer," and his grandson, Gov. Henry Middleton, who enlarged the ponds and planted Camellias brought out by André Michaux and said to be the first in America. The French botanist was a frequent visitor at Middleton Place and furnished the owner with many rare plants and shrubs, among which are some Camellias still living, planted by him for his host. To a Mr. Williams Middleton we owe the magnificent collection of Indian Azaleas.

One needs the magic that gilds the tales of youth to weave with few time-worn words a worthy description of this garden, of what nature and men, sun and dew have woven upon earth's responsive breast. Walking between the tall rows of Camellias and Azaleas in splendid bloom, sunlight filtering through, one steps softly—the place seems almost unreal in its beauty.

The grounds are laid out with a generous appreciation of space, there is grace in the arrangement of the flower masses, symmetry in the broad parterres, magnificence in the wide vistas which open out suddenly giving, through green and jewelled foreground, entrancing views of the river beyond. Through walks close bowered in bloom, overshadowed by low drooping arms of ancient Oaks, moss grown, one emerges upon the bank beneath which the river flows and murmurs the mystic cradle song learnt in the spring at its birth. Little Blue Herons, in their young white clothes, wade in the marshy shallows, and Great Blues rise on winnowing pinions and lose themselves in the hazy distance. There is beauty, fragrance, music—everything to enrapture the senses on a spring day set with the seal of heavenly inspirations.

This magnificent estate is now the property of Mr. Pringle Smith, son of Judge H. A. M. Smith, whose family resides there during a part of the year. Since being in the possession of this family much has been accomplished in restoring and embellishing the garden. The overgrown vistas have been cleared, riotous shrubbery trimmed, many new plants added to the rich and varied collection.

A RARE SOUTHERN SHRUB IN THE GARDEN MAGAZINE & HOME BUILDER DEMONSTRATION GARDENS

Even in the South the white flowers, golden centered and slightly fragrant, of Gordonia are rarely seen and the specimen in our Demonstration Gardens at Garden City, N. Y., was extraordinarily interesting to the members of the Eastern Nurserymen's Association who were our guests on September 12th. The Gordonia was then just coming into bloom. It continues to produce flowers till frost stops its growth for the season.

Gordonia altamaha has a romantic association. Discovered and recorded by the French traveler Michaux on the banks of the Altamaha River, Georgia, it has never since been found native. The younger Bartram brought it to his Philadelphia garden whence the few plants now existing in cultivation trace their origin. It is said to be hard to propagate, but in our experience it has proved as sure as a Willow, from cuttings taken in January with a heel of old wood. Taken in December they stand still a whole year! Our specimen, considered by Prof. Sargent to be one of the best in existence, is about 18 ft. high and is sheltered on the north and west

Two Virginia Homes

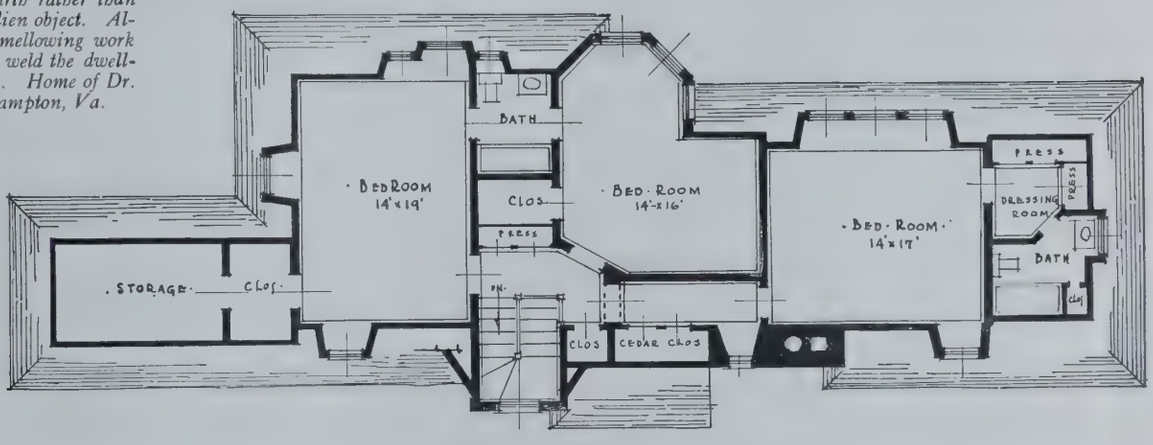
Designed by W. Duncan Lee

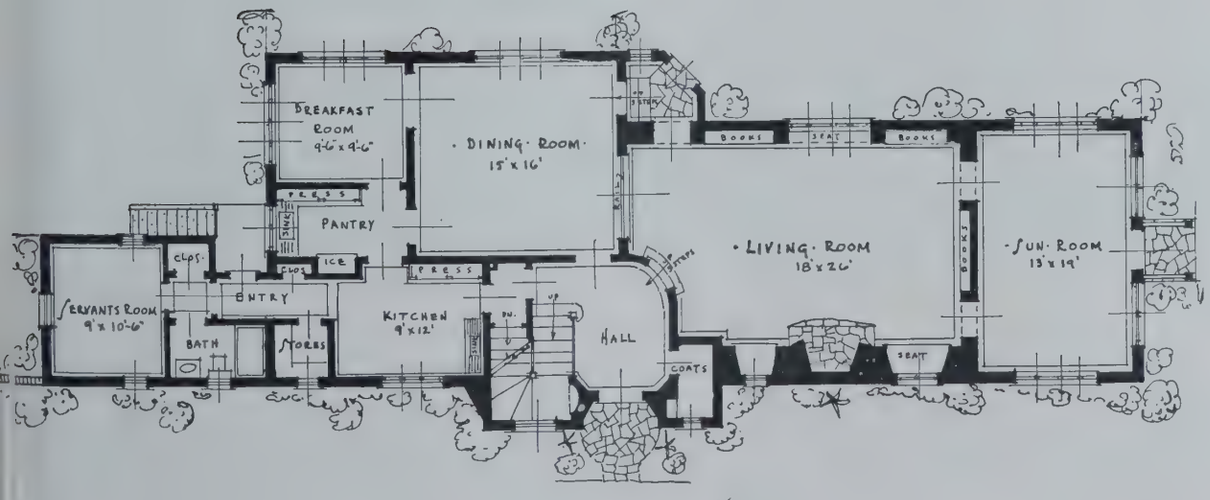
Photographs by Tebbs & Knell

Crooked about its garden like a sheltering arm this city house has all the advantages of privacy and outdoor living usually found only in the country home. Many windows open on the garden and a paved terrace offers pleasant opportunity for luncheon and tea and afternoon naps.

The narrow frieze with its grape and flower motif, the skillfully minimized heating apparatus beneath the windows, and the stairway treatment are all interesting points in the interior design of Mrs. Jonathan Bryan's residence at Richmond, Va.

The long low house has a pleasant air of belonging to its site, of growing out of the earth rather than being merely a superimposed and alien object. Already the planting has begun its mellowing work and will, in another season or two, weld the dwelling even more firmly to its setting. Home of Dr. Frederick M. Hodges at Westhampton, Va.





HOME OF MRS. WILLIAM M. RITTER
Manchester, Vermont

Richard H. Dana, Jr., Architect

A bedroom in 18th Century and early 19th Century American mahogany with a quiet "chinoiserie" paper in three shades of soft light gray

The Place of Period Furniture in the Modern American Home

AMY RICHARDS COLTON

Decorator

Photographs by Kenneth Clark and H. Shobbrook Collins

The History and Evolution of Styles from Early Egyptian Down to Our Own Times Was Discussed by Mrs. Colton in the October Issue (pages 111-115)

STYLES and periods in furniture have over-lapped and cross-fertilized each other from time immemorial, through the ceaseless interchange of ideas and commodities in the Oriental countries, by ancient trade routes; by wars and conquest; by love of travel and adventure; and by great nobles and monarchs vying with each other to import some famous work of art or artist from an older civilization than their own. And now, with the whole world an open book, free to any one who can afford to travel, the cross-fertilization is going on so fast that there is no way to regulate it, and all kinds of bastard rooms and houses are the result.

This should be a time, however, with all the knowledge of the past to build from, for forming an American style, by adopting from the past what will best suit our less formal, more easy-going civilization.

In the United States we have such a variety of climates, and are composed of the descendants of so many races, that no one style seems to fill all our needs. If one were asked by an inquiring client, groping for help, what period to select from, one's first instinct would be to advise against all periods. But, as a matter of fact, there are several regions of the United States where houses built and furnished in a given style, modified to suit the individual needs of the client, and our own time, are well worth attempting; and when completed do not seem mere unlivable *tours de force*.

Throughout New England and the South, houses built and furnished in either Georgian or Colonial style seem very quickly to belong to the soil, and one can vary them enough to avoid monotony. The original houses in New England were usually built of wood, whereas in the South, brick was more often used, and a more genuine Georgian effect produced. Through the Eastern Middle States, where Dutch settlers were in preponderance, the original houses were generally built of stone, with wooden gables, and it is easy to create new ones with the old feeling. Not only has this region an individual Colonial architecture of its own in its stone houses, but the furniture also has a Dutch flavor. It is heavier and richer in color than that of New England. Many fine old chests and cupboards are beautifully decorated with interesting Dutch designs. There is nothing anaemic looking about the Dutch Colonial furniture, or their solid comfortable houses.

The furnishing of the early New England houses corresponded to the simple English furniture from the time of William and Mary down through the Georges. Some of it was imported, but the greater part was made by American cabinet makers, who used many of our native woods, as well as the imported mahogany. All the earliest American furniture, the sort that is most prized now, entirely antedates the use of mahogany. Pine, walnut, cherry, and oak were four of the commonest. In the 18th Century a good deal of painted furniture was introduced that closely resembled the European kinds, but in this style there were some developments peculiarly American.

It is still possible to pick up fine pieces of New England furniture in traveling about, if one can pay the price. To furnish a small house with the more primitive cottage style, or a larger one with the more important pieces of the 17th and 18th Centuries, gathering it together gradually here and there, is a pleasant pastime and certainly more rewarding than furnishing all at once from a period furniture factory.

THE earliest form of architecture, decoration, and furniture that has a hereditary place in this country is the Colonial Spanish, first introduced into New Mexico and later into California three centuries ago. It is now having a revival in these two regions and in Florida as well. This style is very suitable to any dry, hot climate where the foreground has wide horizons and long level lines. Stucco or adobe houses are more quickly and cheaply built than those of wood or stone when the latter have to be transported. The fashion of building around an inner court or patio gives a cool, sequestered place to retire to from the heat, where one can have a fountain and growing things. This style of house gives a fine opportunity for a wealth of brilliant color; gay awnings and brilliant pottery in the patio, and furniture of the somewhat heavy, often richly colored Spanish style. In climates where sky, verdure, flowers, and birds are all brilliant in hue, the effect of a stucco house either washed with color or a deep cream, with red tiled roofs, and inside, clear brilliant colors in the hangings, rugs, and pottery, gives a sense of harmony that is wholly satisfying. It is certainly the antithesis of the restraint, coolness, and superrefinement of a Georgian or English Colonial interior.

The Spanish Colonial type of furniture and architecture is not only the oldest in this country, but seems the most thoroughly native. It is the amalgamation of the Spanish Renaissance ideas (brought over by the Jesuit and Franciscan fathers three hundred years ago) with the symbolism and artistic skill of the Arizona, New Mexico, and California Indians. These two races produced jointly the churches, or missions as they were called, together with the furniture known as mission. Both missions and much of the furniture (thanks to the dry climate) have survived. This furniture has only the remotest resemblance to the cheap, commercial imitations of the same name, and it seems unfortunate that the general furniture buying public does not know what a mine of interesting material lies waiting to be copied and introduced to their homes.

Its style is Spanish Renaissance in general outline and was originally done in polychrome on native woods. The seats to the chairs were of rawhide, attached with thongs, or of fine woven material. The Indian contribution, in addition to the actual construction of the furniture, was the wealth of incised carving in which was embodied much of their symbolism and design, curiously blended with church motives. Their own ideas of color were made use of as well.

One gets tired of the restrained, rigid, and too quietly colored New England furnishings and it seems like a fresh breath from a different world to become acquainted with this Spanish-American style. Now that so many of our richer people are building summer and winter homes in many of the regions where this style is appropriate, it is more than ever worth while to have it studied intelligently and sympathetically.

ANOTHER hereditary touch of a European period can be found in and about New Orleans, where the French influence still lingers. In this region to restore or build anew a country or town house with the feeling of the French 18th Century domestic archi-

WHERE OLD SPANISH FURNITURE SEEMS TO FIT

Bedroom in a Virgina homestead remodeled by Thomas H. Ellett and decorated by Miss Gheen. The bed is Spanish rococo of the 18th Century with an antique Spanish damask spread

tecture, would be wholly suitable and delightful. In building a new house one would choose a model from the south of France preferably, where the climate is similar. This would give a chance for richer coloring and greater picturesqueness, that would chime in better with the lazier climate, semi-tropical vegetation, and dusky servants, who always help make up the picture, when you go below the Mason and Dixon Line.

Few people who have not traveled in provincial France, or made a study of French furniture, realize the simple charm, variety, and bodily comfort in the sort of French 18th Century furniture that was used in country houses from Normandy to the Mediterranean. Each region had its characteristic touches, and as one went south, the furniture grew richer in color and heavier; having received either an Italian or Spanish impulse; but wherever it came from, there is a subtlety, charm, and sense of proportion wholly French, and as far removed from the gilded furniture of the state rooms in the palaces, as our own Colonial furniture. To those who know only the French show places it is a revelation to be introduced to simple walnut arm chairs with rush seats of the period of Louis XVI, but as homelike and unassuming as our own Windsors, and far more comfortable and graceful.

Such furniture placed in a room with simple paneled walls, painted in green or gray, or against an old scenic paper, has a charm and subtlety that the average 18th Century American or English home lacks.

THE most impractical of all European periods for domestic architecture inside or out is the Gothic. It existed when home life as we understand it had no existence, and people either lived in great, bleak, fortified castles, or in hovels. In either case, furniture was of the crudest and rudest, and the only survivals are chests, refectory tables, and a few rough chairs that come down to us by having been preserved in religious orders or churches. The first houses that had any degree of comfort in England were those in the Tudor style, and in France those in the reign of Francis I. Even these were uncomfortable enough and the furniture heavy and rectangular.

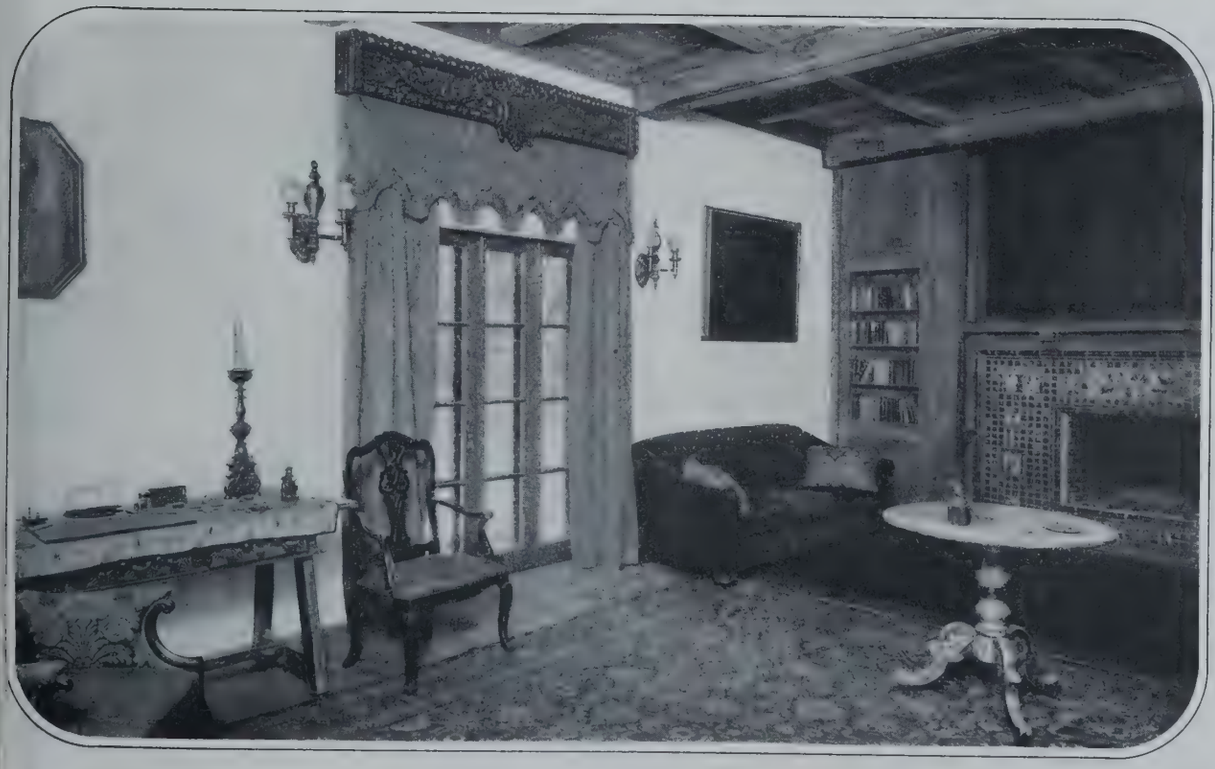
The corresponding period in Italy was a little less rigid as to the lines of the furniture. There were more curves to the tables and the chairs had flexible velvet or leather backs and seats, which shaped themselves to the human anatomy in a way a carved wainscot or Francis I chair could never do. This period, whether in the English, French or Italian form, is only suitable for a very stately house, where entertaining is to be done on a large scale and huge rooms needed; but even so it must be alleviated by some modern ideas of furniture, if any comfort is to be had in the possession of it. Otherwise the whole thing is an anachronism and affectation.

For a strictly summer country house, where the garden is to be important and included with the house, and much out-of-door entertaining done, an Italian effect can be made that in the right setting is entirely successful and not too artificial. Our skies are nearly as blue as Italy's and our summers almost as hot, and water being plentiful, we can create as marvellous gardens if we are given time enough.

These houses never seem as indigenous as the English type of country house in the East and South, or the Spanish ones in New Mexico, California, or Florida. But where the owner and his guests are more-or-less cosmopolitan, and entertaining is done joyously and

MERGING THE SPIRIT OF FRANCE AND OF ENGLAND INTO A NEW WHOLE

A curious blending of old traditions that result in a refreshing and distinctive room. The dining-table once belonged to Charles Dickens; the chairs are Hepplewhite, copied from originals; and the directoire wall-paper panels in "graisaille" (gray and beige) are also genuine antiques. T. H. Ellett, Architect; Miss Gheen, Decorator, (other rooms in this charming Virginia home are shown on pages 172 and 174)



SPANISH STYLE LIVING-ROOM AT SANTA BARBARA

Sometimes when one tires of the restrained, rigid, and too quietly colored New England furnishings this Spanish-American style seems like a fresh breath from another world. The California home of Mrs. Bertram G. Goodhue; designed by the late Bertram G. Goodhue; furnished with antique and modern Spanish furniture in walnut polychrome

A SOUTHERN DRAWING-ROOM AFTER THE OLD MANNER

Furnished chiefly in the 18th Century furniture with a few comfortable modern touches. The fireplace is so often the heart of a room and this one has the additional distinction of being a really old mantel crowned by an original Rembrandt Peel portrait. T. H. Ellett, architect, Miss Gheen, decorator

lavishly, an Italian setting, house, and furnishings may turn out to be highly successful, particularly where some local stone is used in addition to the stucco in building the house. It would be well to use as much antique furniture as possible, and the effect will be less formal where that of the 18th Century is combined with the 17th. With Italian pieces this can be done more successfully than with the French and English styles, as there is less incongruity between the two centuries in Italy. An individual and native touch to an American Italian house can be given by frescoes, done in the Italian manner but with some local American subject.

Finally in choosing a definite period for a house there are two important points to consider. The period which the owners have the most sympathetic feeling for, and the particular region, climate, and surroundings the house is to be built in. When all this is settled do not hurry the building or furnishing if it can possibly be avoided. Let the new house and its setting grow as the fine old estates of the past, gathering the furniture gradually, as the house is building. Each piece will then find its natural place and give even more pleasure to live with than was experienced in buying it.

In the United States there are so many hastily furnished houses, which have a ready-furnished look when completed! In time the dissatisfied owner tears to pieces and refurnishes in another "period," which may give as little satisfaction as the first, for the simple reason that neither period was the thoughtful and deliberate choice of the owners and had no natural connection with their lives or with the region their home is built in.

Winter Flowers Without a Greenhouse

NOVEMBER sees the absolute end of the outdoor flowers. Those who have no hothouses or conservatories will be without blooms until spring. For such, the Pussy Willow is a godsend. Cut and bring into the house some Pussy Willow branches. Put in water in a sunny window and they will bloom in two or three weeks. In the same way, twigs of early-blooming shrubs can be forced—Forsythias, Jasmines, Dogwood, and even the prunings from the orchard trees. Every winter we enjoy delectable bouquets of Apple, Cherry, Plum.

For those who have only window-sill accommodations for winter flowers, a few sprigs of English Ivy stuck in water will prove a delight. These will root in water, and send forth their tender, fresh shoots when the world is white out-of-doors. The new growths can be twined about strings, a basket handle, or any other support the grower wishes to provide. Although cuttings can be taken at any time while plants are dormant, it is advisable to secure wood early from such plants as are liable to winter injury. Such cuttings, and in fact all cuttings, can be had very easily and conveniently at this time, before cold weather comes.—*Lewis E. Theiss.*

INVESTMENTS IN BEAUTY THAT PAY IN CASH

WALTER McQUADE
Architect

Photographs by Mattie Edwards Hewitt, Kenneth Clark, Arthur E. Meigs, Adolph Kruhm

Increasing the Value of Your Home Investment by Planting —How $200 Spent on a Garden Brings a $1000 Return

WHAT Mr. McQuade has to say on the value of planting is particularly interesting because it is not merely an individual opinion but rather the feeling of architects in general. Perceptive of beauty and fine effects, this group of professional men—artists in permanency, we might well call them since stone, bricks, and other durable mediums of expression are oftentimes theirs—are glad of the garden and welcome its mitigating grace; vines that veil the house in friendliness, flowering shrubs that loop it with light and color, trees to cast a sturdy shelter. And then there's the other side of it too—the hardheaded dollars-and-cents point of view. Most of us like to invest our money productively and where will it bring adequate and increasing returns. We are accustomed too, perhaps, to think of gardens merely as investments in beauty, quite over-looking the fact that few things pyramid more quickly in value than plants. A three-year-old Pine, for instance, may be bought for $1.00 and five years later be worth $5.00—a five hundred per cent. return. Of course, the element of uncertainty enters in as it does in all human concerns—the tree may die, but the chances are infinitely in favor of its living; and even the price of diamonds is subject to fluctuation! If you want for one reason or another to sell out, a happily gardened home will bring nearly double the amount of a dwelling barren of greenery. If you are looking for sheer enjoyment, few ways of spending money yield delight more fully and more persistently from season to season than the zest of watching things grow.—THE EDITORS.

LESS THAN TWO YEARS AFTER PLANTING

This finished effect was achieved with gratifying rapidity as the large Elms on either side of the entrance, the shrubs, many bulbs and perennials were set out in the autumn immediately upon completion of the building. By spring the whole had a happily established air quite unlike the bleak aspect shown below. Home of Mr. and Mrs. C. Le Roy Hendrickson at Garden City, N. Y. Aymar Embury II, Architect; L. Lundquist, Landscape Architect

WE WERE speaking of small houses and of their appurtenances and surroundings. Being just a usual group of suburbanites, this was a subject dear to our hearts. The topic was carefully discussed, our absent neighbors' houses were criticised and dissected; after the houses came the settings, and someone had to spring that old chestnut about the "Ivy being to the architect as the sod to the doctor." Of course, in some cases this may be true to a certain extent, but in a grossly exaggerated sense. Ivy does not hide the architect's mistakes though it does certainly embellish his efforts.

There seems to be an age-old struggle between the architect and the landscape architect, but show me the small house or the medium-sized house, no matter how carefully designed, that is really a finished home until the planting and surrounding garden is at least started. And how much nearer it is to the finished home that we are all proud of when this planting has had three or four years of care and growth!

This may seem somewhat

SHRUBS AS INTERMEDIARIES

Hollyhocks, with Roses, Lilacs, and other shrubs weld this house to its site in friendly fashion and a comparison of this picture with the smaller one below quickly proves the value of even a very simple foundation planting. Home of Mr. John T. Arms at Fairfield, Conn.; Clark & Arms, Architects

traitorous to my own profession, but let me prove my point with an instance which came to my attention only a short time ago. A very close friend of mine is advertising manager for a well-known building material supply company. In his advertising campaigns he uses as copy photographs of residences where his material has been incorporated and obtains these photographs whenever possible from the architects, preferring such pictures to the average commercial print. Going in on the train with him one morning, he complained to me of the difficulty he was having in obtaining these photographs. Most of the answers to his inquiries about them were in this vein: "Oh! we have not had any photographs taken of Mr. Brown's house as yet; we want to wait a couple of years until the planting is finished." No doubt Mr. Brown's house is a shining example of individuality, good taste, and clever design. Its character does not depend entirely upon the entourage but this patiently waited for planting does improve and complete the ensemble. If not, why do we architects show such "lovely" trees and shrubs in the perspective of Mr. Brown's house?

In my personal practice I have come to the conclusion that in the preliminary conferences with a prospective client it is far better after one finds out just how far the appropriation can be stretched, to set aside a certain sum for at least preliminary planting in close proximity to the house. If the planting is such an important adjunct to the general scheme, why not set aside a specific appropriation just as a certain sum is customarily set aside for interior decoration?

Of course, the architect has a most varied field to cover. He is suppossd to know intimately the most minute details of everything connected with the building. It may seem like asking too much to have an architect familiarize himself with plant materials and garden design, but is it not far better for an architect to exert himself along these lines and learn at least the rudiments of the simpler planting than just to build a house and wait perhaps for years before his client can save enough money to do sufficient planting to give a finished aspect to the home?

I do not contend that every house built should have a landscape architect. Most of the smaller home builders could not possibly afford this. But in every case where the appropriation can be so managed, by all means hire a landscape architect. If the landscape architect and the architect work in conjunction, I assure you that the finished effect will be a mutual success to both and a perpetual pleasure to the owner.

All architects who have been through the difficult struggle of establishing themselves, usually beginning their practice with the very small houses, know the nerve-wracking trials of trying to give a client a $20,000 house which must be built for $10,000. The young architect is frantic; his client, Mr. Jones, has only just so much money and certain requirements must be met—so many bedrooms, so many baths. Mrs. Jones insists upon an electric range; she has been reading numerous articles on kitchens and innumerable catalogues of domestic equipment. The architect knows positively that if he incorporates all these ideas and suggestions in his plans and specifications the contractor's estimates will so stagger Mr. Jones that the house will never be built. He wants to build this house; to him it is a job,

and the foundation for future jobs. He is not thinking so much of his commission as he is of having another finished house to point to with pride. In his own tactful way he pleads and cajoles and finally, after many conferences, a compromise is effected; but in order to build this house it has been absolutely necessary to

THE VALUE OF VINES

Wisteria, Ivy, a little border of Box, a potted plant or two and presto! the transformation is complete. No house, however lovely in line, is seen at its best without the mellowing influence of greenery—witness these two views. Home of Mrs. Robert T. McCracken at Germantown, Pa.; Mellor, Meigs & Howe, Architects

use every last dollar that Mr. Jones could find available. The house is built and is a very successful house, but Mr. Jones wonders why, if this is such a successful house, it looks so cold and new. The architect is pleased, he knows he has built Jones a mighty good house. He is proud of his efforts, but he does not want to photograph this house until Mr. Jones has done some planting. What is the moral?

Take a stroll through one of our suburbs where considerable building operations are under way. I refer here to the better class developments where the houses are really planned with some thought and study. Let us take a house that has just been finished where perhaps the grading has been started. Compare this house with another house similar in type which has been built for a year or so and around which there has been some foundation planting—very slight planting perhaps, but sufficient nevertheless to add an air of mellowness and to link the dwelling with its surroundings. It seems to be at home and peaceful on its site and how the new house seems to lack that almost indefinite something to make it the welcome home.

One more example by way of illustration. During the last year an immense amount of speculative planting has been carried out in the suburbs surrounding our big cities. It is the business of the speculative builder to build a house as inexpensively as he considers the public will stand; and not only to sell that house at a profit, but to sell that house just as soon as possible after it is completed. It ties up funds and eats up profit to carry these houses. Every cent of carrying charge is deductible from any prospective profit. The average speculative builder does everything possible to, as he terms it, "move" the house, that is, sell it. So the wise speculator invests in some shrubbery. He does not pay for this planting out of the goodness of his heart or because his esthetic sense is touched! No, he has proven that these few plants improve the appearance of his product so much that it has a stronger appeal to the home seeker. The few dollars invested are a big factor in effecting a prompt sale!

Another rather amusing instance has just come to my mind. It is a thought from the long, long ago, the old days of our training. We were students in one of the New York ateliers of the American Society of Beaux Arts Architects. We had regular projects to turn in at each competition and most times there was a terrible rush to finish. Even in those early days if a certain detail of the elevation was not considered by the patron quite up to the standard, we would draw a tree in front of that part of the building. The standing joke was that many a poor piece of architecture had been hidden by a good tree.

We can tour the country to-day and go in raptures over a most romantic vine-covered cottage or the entrancing glimpses of this or that old house among the trees. Strip that cottage of its vines or take away the trees from that old house, and what have we? I venture to say that in most cases there would be a sad disappointment.

As an architect merely, I do not attempt to tell what to plant or how to plant it. This is primarily an appeal for prospective home builders to set aside a specific sum for the planting part of the operation. If you are building a house, ask your own architect. He does know something about it. He will at least tell you the shapes, sizes, and colors. He will tell you where he wants open spaces and where he wants trees. Possibly he may even surprise you by his intimate knowledge of trees and shrubbery; by all means confer with him on this point and, in arranging your budget, allow for your garden.

BULBS AND TUBERS FOR SOUTHERN GARDENS

LAURA B. TAYLOR

Lilies and Their Kin Take Kindly to Conditions in the South—Unexpected Wealth of Garden Sorts Which Surprise the Northern Visitor by Blooming at all Seasons

OF THE long list of bulbous and tuberous rooted plants thriving in Southern gardens, many remain yet to be tried in the lower South, though each year sees additions to the list of successes.

To a fair proportion of people any large flower that is not obviously a "Pink" or a "Rose" is characterized as a "Lily." The word Lily is recklessly used in connection with many plants which are not only not really Liliums at all, but belong to genera quite distant botanically. The colors are truly patriotic. They show, mainly, red, white, and blue. The Atamasco, Crinum, and Hymerocallis for white; the Southern Red Lily (L. Catesbaei) for red; and the lovely Blue Flag (Iris hexagona) for blue. The Flag is, without doubt, the loveliest flower of the entire South and resembles the rarest and costliest Orchid. It blooms over a long period in the spring. Despite the beauty of the Lilies they are among the most neglected of flowers in American gardens. Certainly this is true of Florida.

The North American Lily belt runs across the upper part of the United States and lower Canada, and centers mainly in California, Oregon, and Washington. The Western states have naturalized many imported species that fail utterly in the lower South. However, Florida and other Southern states are giving much attention to the cultivation of the members of the genus and large shipments of bulbs go to Northern markets each year. In some sections the Easter Lily (L. Harrisi and L. longiflorum) is grown successfully and extensively for bloom. This has been done in comparatively recent years, and there are great possibilities for introducing and acclimating others, especially the Regal Lily.

There is hardly a month in Florida without some, so called, Lilies in bloom. Either the Calla, white and yellow, Eucharis, Amaryllis, Atamasco, Agapanthus, or Easter Lilies from December to June; the Hemerocallis, Crinums, Hymenocallis, Guernsey Lily, Zephyranthes, and others, more or less from June to December. Amaryllis may be planted at any time of the year, and if not planted too deep, will bloom during March, April or May.

In Florida all bulbs are planted in the open ground and most of them are not taken up, except for the purpose of separation, every third year, and some not even that often.

In summer the Zephyranthes (the Fairy-lily, the Pink Day-lily, or by whatever name called) is beautiful, blooming from June to August, and multiplies so rapidly it is looked upon as native growth, like its near kin, the Atamasco, which carpets the fields in spring, and by many is called the "Little Easter Lily." When August comes, very often these same fields are covered with the Southern Red Lily (L. Catesbaei) and "one may walk for miles among an almost endless bed of Lilies." Unlike the Atamasco, it resists transplanting. There are other red Lilies probably more beautiful, but this one is so entirely at home in Florida, and the South generally, it is hoped someone will succeed in taming it sufficiently to join the garden family. Many natives and exotics grow side by side in our gardens and are quite confusing to the newcomer.

The beautiful Hymenocallis (Pancratium caribaea) or Spider Lily, while originally from the West Indies, has so far escaped and naturalized itself as to be looked upon as native. It is of the easiest culture, is evergreen, and produces large clusters of pure white fragrant blossoms. A few bulbs will give a succession of bloom all summer.

Eucharis amazonica, sometimes called the Lily-of-the-Amazon, grows in the open, multiplies rapidly, and blooms freely during the winter. With very little attention it gives a wealth of beautiful, waxy white, fragrant flowers at a season when in great demand. They should remain where planted for an indefinite period.

Agapanthus, African-lily, or Blue-Lily-of-the-Nile is a beautiful decorative plant, fairly rarely seen in the North, but growing in Florida as well as the Calla, and is used both in tubs and the open ground. It is most effective when planted near Hemerocallis, the latter blooming for four months if planted in variety.

Of Narcissus, the Polyanthus type heads the list, the Paper-white, and the Chinese or Joss-flower leading in popularity because of free blooming.

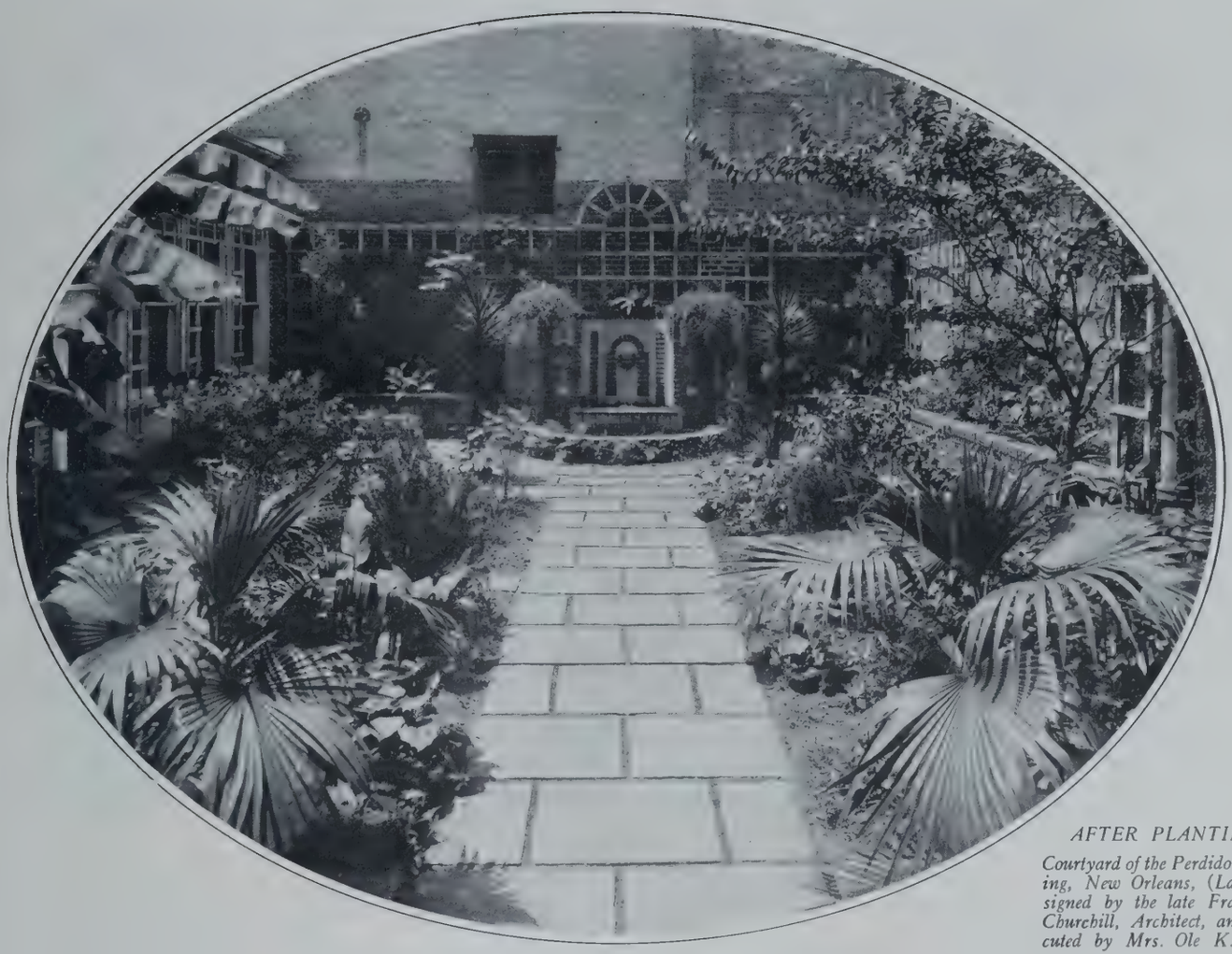
From South Africa we have Moraea iridioides, or Natal Lily. With its lovely iris-like flowers this grows to perfection in Florida and makes a very fine border plant.

It would not be possible in one short article to more than mention the bulbous and tuberous rooted plants of Florida—Cannas, Dahlias, Gladiolus, Montbretia, Snowdrops, Snowflake, Darwin Tulip and many others give us blooms throughout the year, and our flower shows are enriched by their variety in a way that bewilders the gardeners of the North. For example, at the Jacksonville Garden Club Show in April all the following kinds were staged: Agapanthus; Amaryllis aulica, A. Johnsoni and a few Barbadoes; Crinum Americanum; Calla, white and yellow; Daffodils; Dahlias, very large; Freesias, white and red; Gladiolus in large collections; Hyacinths; Hemerocallis, six kinds; Iris, (Spanish, German and Native Flag); Ixia; Lilium Harrisi and regale; Moraea; Scilla; Zephyranthes.

Giving the Yucca its Due

YUCCA filamentosa is not grown as extensively as it deserves, for it has many ornamental qualities. Possibly one reason it is not more widely employed is that many persons fear it will not stand the climate of their locality. It is perfectly hardy but it is well to protect the crown to prevent water or snow getting in. The alternate freezing and thawing will do the damage. About all the protection necessary is that when the first frost appears gather the leaves of the plant closely together and tie them with hay or straw bands. Do not use string as it will cut. When the leaves are thus drawn together they will act as a tent, keeping snow and rain from settling down on the crown.

—*Jesse A. Currey*



AFTER PLANTING

Courtyard of the Perdido Building, New Orleans, (La.), designed by the late Frank G. Churchill, Architect, and executed by Mrs. Ole K. Olsen

MAKING CITY COURTYARDS GAY

ETHEL HUTSON

Secretary of the New Orleans Garden Society

Photographs by H. J. Harvey

Plants of Proven Worth for Cities of the South—Gardening as an Asset to the Business Section

DOWN the narrow confines of Perdido Street, New Orleans, there is little picturesqueness or color. Gray walls, brown doors, dingy offices of cotton buyers or real estate men alternate with an occasional brick-and-tile dealer, or a cigar store. "Perdido" received its name, which is Spanish for "lost," because in early days it lost itself in "the sticks" or swamp behind the town; and even today, though twenty-story buildings stand where those swamps once were, you do not look for beauty nor delight in Perdido Street.

That is, you do not unless your eye has chanced to catch a glimpse through the open doorway of the Perdido Building and the office of its owner, Ole K. Olsen, "Ingenieur." If that has happened once, and you have glimpsed the green Banana and Palm leaves, the blue tile and warm red bricks of the fountain in the courtyard, you will remember Perdido Street. Moreover, you will not rest until you have found some excuse to visit the office of the engineer, and obtained permission to wander into the tiny courtyard behind it that is so full of living color and growing beauty.

BEFORE PLANTING

The courtyard in 1912, an almost conceivable transformation when this dreary barrenness is compared with the ordered beauty above

Mr. Olsen is very proud of his courtyard, but after all it isn't his. He is only a tenant of its beauty. The real creator, and the gardener who still maintains it, is Mrs. Olsen. And courtyards are her hobby, so she likes to tell about the evolution of this one, her first, which has given her husband's office the dis-

tinction of having the most attractive background of any business office in New Orleans. She hopes it will soon be imitated by many other courtyards in the rear of office buildings, now dingy piles of broken brick and concrete and ashes; even as this was, not many years ago.

"It began when I was working in the office," she says. "You know, for fourteen years I was my husband's helper and bookkeeper. I studied bookkeeping by correspondence in order to help him.

"I enjoyed the work, but I was always trying to vary the monotony of our surroundings by putting window-boxes in the window opening on the court—and the draughtsmen would move them, because, they said, they were in the way.

"Then I resorted to potted plants set in the sunny spots in the courtyard, and vines to clamber from tubs up the walls. I put up a bird-house, which became a mass of rosy color when I trained a vine of the Cadena d'amor or Rosa de montana (Antigonon leptopus) over its support. The first simple efforts at a garden plot were made when Mr. Olsen moved into the building in 1912, but it was not until 1920 that the courtyard was laid out as it is now.

"I well remember how thrilled we were when we first discovered that beneath the pile of débris, ashes, and concrete that filled the yard there really was soil that could be dug up and planted. Before that, all the plants had been in tubs or pots.

"We found it great fun to garden during our spare time at the office. It was a rest to stiff backs and weary eyes to get out there in the sun and fresh air, and do a little spading; and a joy to see the plants come up and grow and blossom.

"Many summers the plants flourished there, but I was not satisfied with the arrangement of the tiny garden, and so at last I secured the help of an artist, the late Frank G. Churchill, the young architect whose recent death has been such a loss to New Orleans. He it was who designed the wall fountain. It is of brick and terra-cotta, the basin for the goldfish being lined with blue terra-cotta tile. The top shallow basin of the fountain is a bird-bath, and the sparrows and neighborhood pigeons make it their daily rendezvous.

"The idea of the bricked wall planting space against the surrounding walls is copied from the courtyard of the Paul Morphy house on Royal Street, for we wished to utilize as much as possible the general features of the old Creole courtyards and to plant, in the selfsame way, Southern plants and shrubs."

Mrs. Olsen has experimented successfully with a number of plants, reviving the use of all she could find which, traditionally, were grown in Creole gardens. Such hardy growths as Oleander, Ficus, Aspidistra, and other plants which withstand indoor conditions, dust, and lack of sunlight, were first tried, but experiments have added a score of shrubs and as many herbs and vines to the list of plants which will flourish in a Southern courtyard.

"Roses do not succeed," Mrs. Olsen regrets. "They need more sunshine. But in the winter our courtyard can be gay with Poinsettias and many evergreen shrubs, while in summer Hibiscus, Lantana, Cannas, Crêpe Myrtle, Zinnias, and other flowers lend color and brilliance, with Coleus and Caladiums and other plants of varied foliage. Among the shrubs, Pomegranate and Cedar, Myrtle and Sweet Olive, grow readily. Ivy and the small climbing Ficus help to cover the walls, and we have Moonvine and Morning-glories, and Bougainvillea on the trellis."

Two tall Yuccas stand sentinel before the fountain with its lion's head dripping coolness into the bowl below, for the goldfish and Water-lilies. A small Ginger-lily and a ruddy Ricinus match their broad leafage, green against red. Everywhere Palms and Ferns add to the effect of tropical luxuriance, and vines break the monotony of dull brick walls, or serve to screen unsightly openings and objects. There is even a small Pecan tree growing near the fountain, planted by the chief draughtsman the day he left to go overseas with the A. E. F.

The problem of appropriate "courtyard furniture" is one which Mrs. Olsen confesses she has not yet solved. Ordinary conventional garden furniture does not suit at all, she declares; she has endeavored to obtain some of the old-fashioned wrought-iron and cast-iron seats and chairs, used in the Creole courtyards of the past; but a diligent search has brought scant results. The bench in the Perdido Building courtyard has been improvised from a discarded curbstone! "It's not what I want, but it's better for its place than anything I have been able to find," she explains.

Below Canal Street, in the old French quarter of the city, there are a number of attractive courtyards, among them some that have recently been remodeled and re-planted, like that of "The Green Shutter" and the old Paul Morphy house; also the courtyard of the Arts and Crafts Club, on Royal Street, which is in Mrs. Olsen's care as chairman of the committee in charge. To this, as to her own courtyard, she gives her personal efforts. "What's the use of having a garden if you don't garden yourself?" she queries.

The following plants which have been successfully grown by Mrs. Olsen are doubtless also suited for courtyards in Mobile, Jacksonville, Tampa, Pensacola, Brunswick, Charleston, Savannah, Galveston, Houston, and other Southern cities. Many would flourish farther north.

Trees and Shrubs

Abelia, Box, Common Myrtle, Hibiscus, Hydrangea, Nortensis, Indian Azalea, Japanese False Yew (Podocarpus), Japanese Paper-plant (Fatsia), Japanese Plum (Eryobotrya japonica), Night-blooming Jasmine (Cestrum), Oleander, Palms of various sorts, Pecan, Pittosporum, Red Cedar, Rose-of-Sharon, Sweet Olive

Herbs

Ageratum, Asparagus Sprengeri, Aspidistra, Begonias (Rex and others), Caladium, Canna, Caster-Bean, Cockscomb, Clerodendron foetida, Coleus, Dahlia, Ferns of various sorts, Geranium, Ginger Lily, Lantana, Pot Marigold, Shrimpflower, Water Lily, Zinnia

Vines

Bougainvillea glabra, Climbing Fig, English Ivy, Moonflower, Morning-glory, Rosa montana

Old Gardens

I THINK I love old gardens best
That in the sun may dream and rest,
Where nodding daffodils break rank
To wander down a grassy bank,
And flower-beds once primly made
With indiscretions far have strayed;
Where sunbeams shuttle in and out
And lacey patterns spread about.
In spendthrift mood, the roses fling
A wealth of golden blossoming,
And yellow birds as glad as day
Still carol—throwing songs away;
And gnarled old fruit trees shining by
Lift their white dreams to the sky.

Charlotte Newton

Keeping Plants Healthy Indoors

ESTELLE H. RIES

Author of "The Decorative Use of Trellis" (G. M., Feb., 1924), "Gardens and Sculpture Charm Together" (G. M., Aug., 1923), and other articles

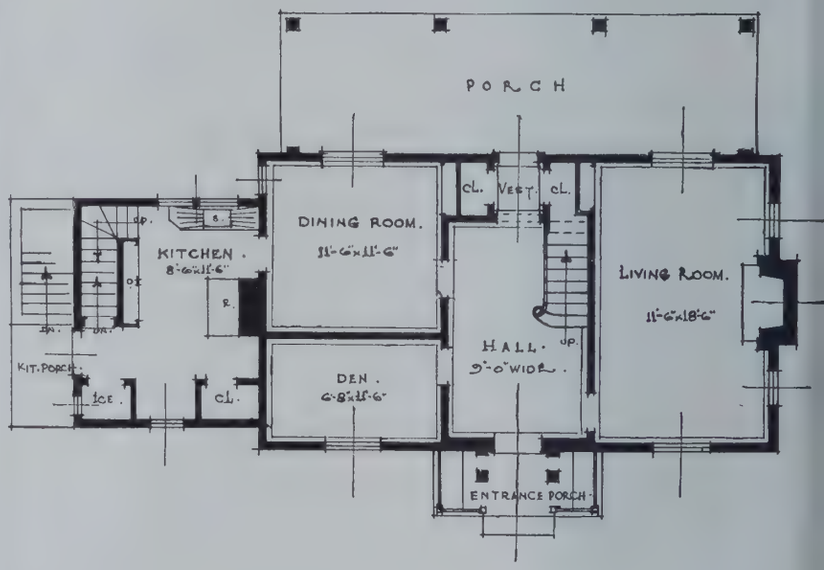
SCARCELY a home nowadays but harbors at least a bit of a garden somewhere within its four walls—on the sunporch, in a sunny bay window, scattering about hall and living room little gay notes of life. Oftentimes plants are also well used to emphasize points of structural or architectural interest in a house. Tall Palms or Spruce or Bay at an entrance doorway, or to mark a panel or balance window corners or serve as a note of cheer in a vestibule or indicate a formal stairway—there are innumerable uses. It should be borne in mind, however, that certain austere, uncompromising-looking plants are not appropriate for a fluffy, lively room, any more than a fluffy, lively plant seems at home in a formal, dignified location.

Do not place a plant directly in a jardinière. Jardinières are not made to hold soil, but to hold pots containing soil. They are nearly all glazed and are never provided with outlets for water. Their function is primarily ornamental, but when used as intended they also serve to catch the drip from the pot and to prevent excess evaporation. Whatever the type of vessel in which plants are grown, there should always be openings in the bottom to permit the escape of the surplus moisture in the soil after watering. When proper drainage is not supplied, the soil becomes water-soaked, air is prevented from coming in contact with the roots, the soil becomes sour, the roots decay, the plant droops and dies before its time. For plants which are not given a jardinière, a saucer of the same material as the pot is part of the equipment. Some pots come with such saucers attached. These are distinctly undesirable, for they defeat their purpose, which is to catch the surplus water and remove it, and this will inevitably be neglected if the whole heavy plant has to be carried away and turned upside down. It is also good practice to place the plant in a pan of gravel. This absorbs the surplus water from the pot and slowly evaporates it into the room, keeping the surroundings suitably moist.

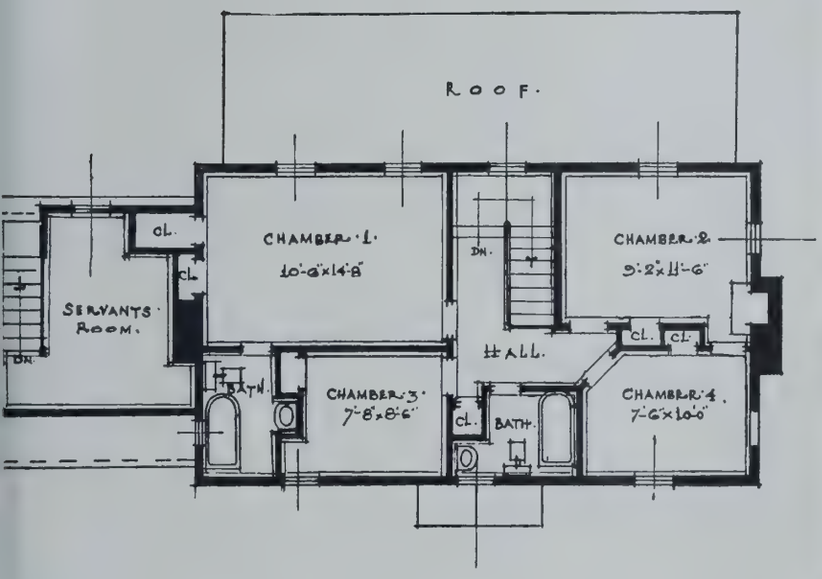
Hanging baskets lend a grace to the decorative treatment of the house and living porch. They should be hung firmly on strong, small galvanized chains or wire strong enough to support the plant easily and not subject to rust or weakening. They should be hooked into a material strong enough to sustain the weight of the filled basket when watered, and not, for instance, into a plaster ceiling sure to crack and cause the hook to loosen. The hook should have a decided "s" termination to prevent the chain from slipping off. Hanging baskets are frequently failures due to the care necessary in handling them. High in the air as they are, they dry quickly and need constant rewatering. A fine type is available, having a tube in one corner through which one pours the water. It reaches a false bottom containing sponges that hold and distribute the moisture, so that dripping and leaking are eliminated and only occasional rewatering is necessary.

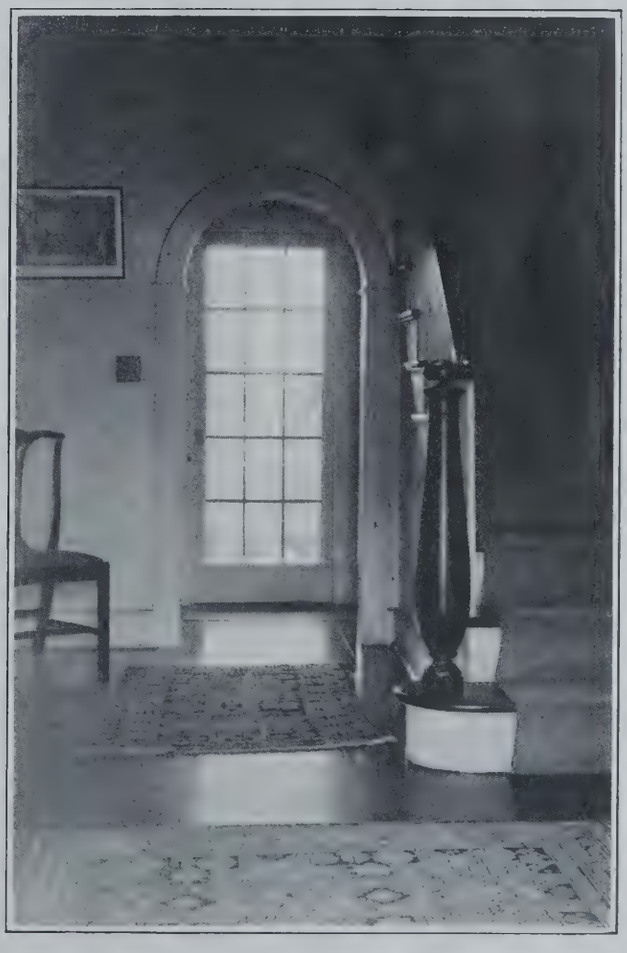
Window boxes and plant stands are also made on this principle, which is known as sub-irrigation, and is conceded one of the best devised, for this method of underwatering prevents the surface of the soil from becoming hardened as in the surface-watered pot. A liberal supply of air to the roots is constantly maintained through the sponges. The soil will always be found workable and loose, and the moisture evenly distributed.

Left to itself out-of-doors, a plant's aim is not primarily beauty, but self preservation and perpetuation of the species. To be a decorative success, it must be relieved of its other responsibilities as indicated, before it can realize that ideal.



A Small Country Home of Distinction





Mr. Thomas Whitall's House

at Katonah, New York

Polhemus & Coffin, Architects

Photographs by Mr. Thomas Temple

PERFECTION IN THE LITTLE HOUSE

II. Planning and Equipping the Bathroom

PHIL M. RILEY

The first of this very practical series by Mr. Riley on household appointments which make not only for comfort and convenience but actually for health as well, appeared in the September issue under the caption of "Equipping the Kitchen for Easy Housekeeping"

IF IT is true that cleanliness is next to godliness, as an old maxim reads, then the bathroom is the most important room in the home; its equipment and upkeep are critically noticed too by the more intimate of your friends and your house guests. From any viewpoint it is essential to the health and comfort of every member of the family and so deserves careful planning and adequate equipment, the best one can afford. There is no better investment in the home than good bathroom appointments and plumbing.

Whether one bathroom will suffice depends on the size of the family. One bathroom will not conveniently care for more than three or four persons although bathroom facilities are greatly increased if the various bedrooms have separate lavatories, or a lavatory and toilet are provided in a small room off the first floor hall, under a stairway, for example. A private bathroom for the master's chamber and another for guests and the rest of the family, if any, is often a good arrangement. If provision is made for a servant, a separate bath should be located adjoining the servant's room.

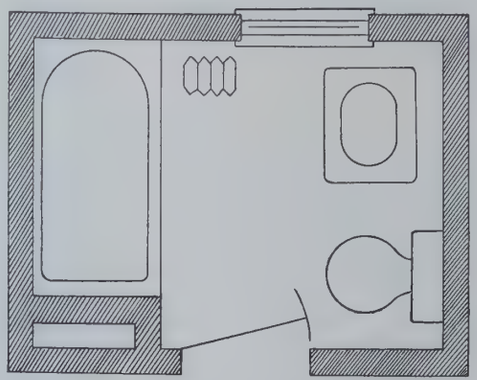
Bathrooms are best located on the chamber floor for the sake of greater convenience in making the morning and evening toilet, when they are used most. In small houses having only one bath it is plumbing economy to locate it over the kitchen. The saving hardly warrants disarranging a desired floor plan, however, as plumbing laws now usually require separate stacks or soil pipes as an outlet and vent for the bathroom and the kitchen sink and laundry tubs.

The ideal bathroom is neither too small for comfort nor too large for easy cleaning. Only enough space about each fixture for the comfortable accommodation of the user is required. Good arrangement is of much importance, and a simple and satisfactory scheme is shown in the accompanying plan. A bathroom 6 x 8 ft., with a window on the long side nearer the lavatory than the tub, is adequate. For thorough ventilation, yet a greater degree of privacy than elsewhere in the house, make this a broad window and $3\frac{1}{2}$ to 4 feet above the floor.

THE introduction of charming color and line in bathroom appointments, such as elaborate commode lavatories and tubs encased in colored tiles, is a delightful recent development in fine American homes of distinction. For the ordinary home, however, a bathroom finished and equipped throughout in white is of lower cost and generally preferable.

Tile for the bathroom floor and dado can hardly be excelled, glazed tile for the latter and unglazed for the former, to prevent slipping. Laid in cement, the tiles forming floor and walls become virtually a single piece of solid masonry through which splashed water cannot penetrate and affording no cracks in which dirt may collect. The same is true of rubber floors and wainscots, which are also excellent. Nor are linoleum floors and wall-board dados, finished with gloss enamel paint to simulate tiles, or waterproof wall coverings applied like paper, to be despised in low cost houses. Whatever the floor and dado, the walls above and the ceiling should be of hard plaster, finished smooth, and with the door, window sash, and casings painted with three or four coats of enamel paint.

HEATING and lighting deserve special attention as the bathroom must be warm and good vision is essential. A radiator of adequate size is best placed on the outside wall under or near the window and is preferably enameled white or silvered to match either the white bathroom fixtures or nickel trim.



A WELL ARRANGED BATHROOM PLAN

Showing built-in tub, heater, and wide window, also convenient placing of lavatory and toilet for the ideal bathroom, which is neither too small for comfort nor too large for easy cleaning

For general illumination a white enamel ceiling fixture, with diffusing shade controlled by a wall switch outside the bathroom, is desirable. For shaving and the toilet the wall mirror should be lighted from above or at the sides by bracket lights operated by pull chains. At least one and preferably two convenience outlets, one high and the other low on the wall, are essential for plugging in electrical appliances. All plugs on attachment cords should be of porcelain. An electric heater makes for bathroom comfort in the spring and fall, and an electric fan during the heat of summer. Electric hot water heaters, curling irons, etc., are convenient toilet requisites.

THE selection of fixtures for the bathroom is largely a matter of size and price. Inexpensive fixtures made by reputable manufacturers are quite as sanitary as expensive ones, even if not of equally good appearance. The best lines of fixtures have been practically standardized, all of the leading concerns making much the same patterns, except that certain firms also specialize in a few distinctive patterns of their own.

Porcelain and enameled iron, the latter also known as porcelain enamel, are the materials now most commonly employed for all kinds of bathroom fixtures. Vitreous china is also much used for lavatories, water closets, and flush tanks, but not for pieces so large as bathtubs. Porcelain is an excellent, hard, impervious material of good appearance, but expensive, and so is used chiefly when the cost is not a serious consideration. In most lines there are three grades at different prices according to freedom from imperfections.

Porcelain enamel fixtures, made of cast iron enameled on both sides, have come into widespread use because of their relatively light weight, durability, attractive appearance, and moderate cost. Most manufacturers provide only one grade, guaranteeing all their fixtures to be first class. Many excellent designs are available and one will have no trouble in finding what is wanted from such a large variety of excellent patterns.

BATHTUBS, to be had in many sizes and shapes, are of three general types: tubs with legs and open underneath; tubs with closed base underneath; and built-in tubs, entirely filling a niche at one end of the bathroom or set in one corner. Of these the first is the

least and the last the most desirable. Both built-in and solid base tubs obviate the inconvenience of cleaning beneath them, and reduce the amount of tile flooring to be laid. Tubs may be had sloping on one end and straight at the other with end supply and waste fittings, or sloping at both ends with supply and waste in the center at the back. For the ordinary house, end supply is usually better, and a tub 5 feet long, 30 inches wide with a 3 or 3½-inch roll rim about 23 inches above the floor is customary equipment. When a niche tub is used the supply and waste pipes are placed in a wall compartment at the end of the tub. Otherwise the space in which the tub stands should be from four to six inches longer than the tub to allow for piping.

For those who enjoy shower baths the tub shower, piped from the wall above the tub, is least expensive and quite satisfactory; a duck curtain to keep the water from splashing on the floor being supported by a large nickel-plated ring attached to the wall. A special lever-operated mixing valve in the wall controls both the hot and cold water. There are simple overhead sprays and more elaborate and expensive outfits supplying various streams and sprays, the fixtures folding back against the wall when not in use. It is possible to secure a shower outfit giving needle, shower, shampoo, and other special types of spray, or one giving merely a head spray with perforated pipes below at sides and back. The head spray should operate independently of the side and back sprays, as many like the latter without the former. For those who prefer to take a shower sitting there are, of course, various types of enameled white stools and seats.

LAVATORIES are made in almost every conceivable size and shape with oval and round washbowls. Some are supported on brackets or wall hangers while others have legs or pedestals and stand well out from the wall. The latter, whether round, oval, or rectangular, are most attractive in appearance and sanitary because it is so easy to clean all around them. A good average size of lavatory is 20 by 24 inches with an oval bowl 12 by 15 inches.

Faucets for both lavatories and tubs may be had in several different practical types and designs, and with nickel, nickel and china, or all china handles as the fancy dictates. A quick-draining waste, with unobstructed outlet and removable outlet plug, is the most satisfactory type for both lavatories and tubs.

Water-closets were formerly made in a seemingly infinite variety of types, styles, patterns or shapes, but have been standardized to a considerable degree and in a general way all standard fixtures are similar. The syphon jet closet of vitreous ware in recent years has pretty much supplanted its predecessors, the unsanitary washout and the noisy washdown closet. It is furnished in two types, the silent and the regular. In a syphon closet the water from the city supply is divided, part entering the rim above the bowl, and part entering the bottom of the bowl in the form of a small, high-pressure jet, so that when the closet is flushed, the sudden entrance of a stream of water in the bottom of the bowl starts the emptying of the closet by suction. With water pulling below and pushing above the closet is quickly emptied, the bowl being filled again to seal the fixture from sewer gas in the sewerage system by the afterwash from the tank or flush valve. The syphon jet closet carries a large water surface and deep water seat in the trap, reducing the liability of fouling and escape of sewer gas.

No water-closet is absolutely noiseless, but the design of waterways in the hopper and the valve in the flush tank are such that some of the best syphon type closets cannot be heard outside the room in which they are located. This is, of course, the standard to demand.

High flush tanks and long dangling pull chains have given place to the less noisy and more accessible low tanks back of the closet and operated by a little lever or push button. The best of them are of enameled iron or vitreous ware, though cheaper copper-lined wooden tanks are also to be had.

All the exposed piping of the modern bathroom is nickel plated, therefore is of good appearance and easily kept clean. No reputable plumber would think of installing anything else.

Water-closet seats have been greatly improved, much study having been given to the best shapes. Most patterns now furnished are sanitary, very durable, and do not warp, crack, splinter, or chip. Wood seats variously treated with varnish, heavy enamels and sheet celluloid are common, also several seats made of non-porous composition materials.

A WALL cabinet with adjustable shelves for medicines and toilet requisites, either attached to, or better still built into the wall, is a practical necessity. Such cabinets are available of wood finished in various ways, and also of enameled iron. As a toilet mirror usually fills the panel of the door the cabinet is ordinarily located over the lavatory. Wall cabinets range from plain rectangular affairs of moderate price to expensive and beautifully wrought designs with triple bevel plate mirrors handsomely decorated.

Most well-equipped modern bathrooms include, in addition to the essential fixtures already mentioned, numerous convenient fitments for soap, brush and comb, etc; towel bars, toothbrush and tumbler holders, sponge holders, roll and sheet paper holders, hooks, shelves, etc. Such fitments may be obtained of nickled or white-enamelled brass, and also of porcelain and china. Of these materials the two latter are preferable as they never tarnish nor chip. Porcelain and china fitments are made in sizes to replace standard tile units in the dado and are installed by a tile contractor when the house is built.

Bathroom stools and tub seats, sash curtains, bath rugs, rubber bath mats to prevent the possibility of slipping in the tub, and other little conveniences too numerous to mention provide the final refinements of bathroom equipment which contribute so much to creature comfort.

In closing, a word ought to be said for the much-maligned plumber. His calling is an important and highly specialized one requiring extensive knowledge, experience, and skill, and deserving payment accordingly. The health and comfort of every family rests largely in his hands. However good the plumbing fixtures provided, they will be of no avail unless installed and piped rightly and well. It is economy and satisfaction to employ in the first place the best plumbing contractor one can find. Let anybody who would cut costs drastically on this item of the home building appropriation first contemplate the certain fact that many good plumbers make their biggest profits in doing over the work of poor plumbers that has failed to give satisfaction.

Hints for the Handy Man

ATTACHING storm windows to the frames with ordinary wood screws through the edges of the sash has become an antiquated method. Much simpler and more satisfactory are the special storm window fastenings now obtainable at any good hardware store. They consist of two hangers for the top of the sash, which go over hooks in the frame above the window, and a small lever-operated fastener which holds the bottom of the storm window firmly in place against the sloping surface of the window sill and permits the storm window to be swung outward a little at the bottom for ventilation and holds it there. Once these fixtures have been attached to the windows and window frames it is a quick and easy matter to put storm windows on in the autumn and take them off in the spring.

TOO often the only parts of the home based ment separated from the rest by partitions are the laundry and perhaps a cold vegetable room with earth floor. Fully as important is a separate heater room inclosing the heating plant, the coal bin, and space for the ash barrels before emptying. Such a room is easily partitioned off at small expense with wall board or sheathing.

OUTSIDE faucets for hose will be needed only a short time longer. For each of them there should be a shut-off valve and drain inside the basement. These should be closed before freezing weather sets in and the outside faucet opened to admit air to drain the pipe and prevent bursting of the pipe and faucet.

A New Garden in the Oldtime Manner

At Hillcrest, the Home of Mrs. J. Choice Evins Spartansburg, South Carolina

In less than two years this garden has come thus to full flower under the skilful direction of its owner, Mrs. Evins, who planned it in harmony with the very old dwelling it brightens and beautifies.

Over the archway climb American Beauty and Lady Gay Roses and along the fence the fragrant Gardenia Rose. Annual Larkspur, Rosy Morn Petunias, and Ageratum throw color about the birdbath (above). Familiar perennials flourish in the hardy borders and in the springtime hundreds of bulbs lift their gay heads

"THE SPIDER-WEB EFFECT OF SPANISH MOSS"

GARDENING IN THE MID-SOUTH

J. WOODWARD MANNING

Photographs by Melchers

Where Plants of the Tropics and Plants of the Temperate Region Meet and Merge—Evergreen Hedges and Vines and Good Shrubs for Screening

WITH climatic conditions that demand the creation of shade and render the use of lawns comparatively impossible, we have in the Mid-South (referring to the area from the southern line of Virginia to the northern line of Florida) a condition that calls for a landscape treatment totally different from what is done in the North.

Within this range there is a difference of altitude from the seacoast to 6,500 feet in the mountains of North Carolina, with a corresponding wide range of soils and marked variation of temperature, and of course, in the higher altitudes we have virtually Northern conditions. This applies to the surroundings of Asheville, Hendersonville, Blowing Rock, and Tyrone, particularly favored locations with natural ranges of Rhododendrons and Azaleas growing in prolific abundance.

Let us consider, however, the lower coastal regions and higher escarpments up to that on which Greensboro, North Carolina, is situated. Wilmington and Beaufort (N. C.) are typical of the coastal zone within which a condition almost semi-tropical in its effects exists. The forests along river banks show the spider-web effect of Spanish Moss to a very considerable degree and such exotics as Bottle-brush (Callistemon lanceolatus) the Banana-shrub (Michelia fuscata), Camellias in variety, the Japanese Medlar (Eriobotrya japonica), Escallonias, and Pittosporums thrive to the highest degree.

Palmettos are rare natives and the Chusan Fan Palm (Trachycarpus Fortunei) grow into fine specimens. There is a monotony of level lands with dominating Pine forest growth relieved by Laurel, Willow, and Live Oaks, often seen in magnificent specimens. Where tidal streams wind in back from the coast with moderately high banks, Red Cedars, White Cedars, Bald Cypress, Scarlet Maples, and Gum Trees form dense forest effects with a wide variety of shrubs of which active horticultural practice has hardly made use, such as the Youpon (Ilex vomitoria) which is unique in its possibilities of widely varied Southern uses. Its evergreen foliage, rapid growth, varied outline, and long persistent scarlet fruits make it most desirable, and it is easily transplanted. The evergreen Osmanthus americana (American Sweet Olive) and Red Bay (Persea borbonica) are but suggestions of natives of this coastal plain region yet to be brought into gardens.

The notable places within this region have widely used Live Oaks, Magnolia grandiflora, Deodar Cedar, and Red Maples as dominating shade-producing features of their grounds. The blending of deciduous with evergreen trees creates a most pleasing variation highly enhanced by the winter contrast. Specimen plants of dwarfer nature give details to such grounds without too much encumbrance of thicket planting.

THE first escarpment within which is the Sand Hill Region, was probably the old seacoast sand-dune area of an earlier geological period; of varied outline, perhaps closest to the coast near Dismal Swamp at the North Carolina and Virginia line, swerving southwesterly and finally westerly through mid-south Carolina and Georgia into Alabama, disappearing again in the Mississippi valley. Looser sand prevails here, yet a clay substratum often becomes exposed and serves to supply a moisture quite unapparent at first glance. The vegetation is mostly Short-leaf Pine, interspersed south of Raleigh with a long narrow belt of Long-leaf Pines and, where the natural forest has been destroyed, Scrub, Post, Turkey and other Oaks form a ragged landscape suggesting greater sterility than is the fact.

The river valleys are of varied growth with Red Maples, River Birch, and Gums predominating. Climatic conditions here are favorable to such exotics as Cape Jasmine (Gardenia Fortunei), China Trees (Melia azederach), Empress Trees (Paulownia imperialis), English Laurel (Laurocerasus in variety), Aucuba (Aucuba japonica), Holly-leaved Tea Olive (Osmanthus japonicus), and Bhotan Pine; but Camellias, Chusan Palms, Palmettos, Pittosporum are used with danger of loss. Magnolia grandiflora, Judas Trees, White Holly (Ilex opaca) are perfectly happy.

Taking the region of Pinehurst (N. C.) as most indicative of the possibilities of this region it is only necessary to say that the last thirty years has been sufficient in which to create a paradise out of what was considered waste land, for which one dollar an acre was a satisfactory price to unload. Grapes, Dewberries, and Peaches have proved happy and profitable, the latter now being grown by thousands of acres. The Long-leaf Pine, by reason of its grotesque youthful effect changing to a dignified symmetry in mid-age to be followed by most picturesque habits in old

age, has formed a dominant feature in landscape treatment but may be said to be over used in that the value of shade and varied outline by the use of rapid growing deciduous trees is neglected.

Greensboro, Charlotte (N. C.), and Augusta (Ga.) in the Piedmont region are at considerably higher altitude and Box (Buxus) in its varied forms thrives to the highest degree while other exotics such as Cedar of Lebanon (Cedrus libani), China Tree (Melia azederach), Mimosa Tree (Albizzia julibrissin), Crêpe Myrtle (Lagerstromia indica), Dasylirion (D. texanum), Nandina domestica, the Shining-leaved Privet (Ligustrum lucidum) are hardy.

Of natives, the White, Willow, and Shingle Oaks; and Red Maples form magnificent specimens. Of the shrubs most commonly used in the North nearly all thrive quite well in the Mid-South. A few, such as hybrid Lilacs and Japanese Barberries, are less vigorous under conditions of strong glaring heat. All the kinds mentioned as thriving in the regions of higher altitude thrive quite as well on the coastal plain.

The general conclusion about landscape planting in the mid-South with its need for shade and essential lack of lawns is that we must not expect those broad spaces with the brilliant turf of the North, but that specimen trees in open grove-like effects are indispensable with liberal use of Broad-leaved Evergreens as well as Conifers to form the main features of the immediate surroundings of the house. This need not in any way interfere with extensive featurings of the formal or informal type of shrub and flower garden.

VINES FOR THE HOUSE AND PORCH

SHADE is the crying need in mid-summer especially, because no matter how hot the mid-day sun may be shade is almost startling by comparison in its abrupt coolness. Where flowering effect is not of prime importance the Kudzu vine with its rampant growth and broad overlapping foliage forms an ideal screen with the advantage that in winter it lets in the sun. Grape vines (other than the Scuppernong, which is too rampant and too entangling for house or porch use) give screen and fruit during summer and do not exclude winter warmth. The English Ivy, except on walls or brick, is too penetrating beneath clapboards and is better on tree trunks than on houses.

Wisteria possesses more attributes of value in general than any other vine—somewhat rampant, it is true, yet with care easily trained into any desired way and giving a shade that is not too dense. The Chinese Wisteria (and its white variety) is most dependable for flowering, and April first finds it literally festooned. The American Wisteria (Wisteria frutescens) is denser in growth and carries the season of bloom well into the summer, though never showing a large quantity of bloom at any time. The long-clustered Japanese Wisteria is only satisfactory where moisture conditions are favorable; then it is a wonder in its effect.

Of Roses, with the old favorite Maréchal Niel or perhaps its rival in climbing, Perle des Jardins, for yellow, the pink Climbing Devoniensis or climbing Helen Gould of rose crimson, beauty of growth and flower can be had from March to December. The Empress of China can be said to bloom ten months of the year and is an excellent climber; while the Cherokee Rose in any of its types is fine.

Throughout the region I am constantly running across the Evergreen Greenbriar (Smilax laurifolia) used as a porch vine and it serves its purpose most admirably, always fresh in its evergreen character and with its long-reaching growth covering many linear feet distant from the root. Apparently these have been plants collected from the neighboring swamps; certainly it is not commonly offered by the nurserymen, but in any event it is a really good climber. Its flowers are inconspicuous.

Another good vine for the South is the Five-leaved Akebia (Akebia quinata). Its rapid dense growth and capacity to climb even the smallest wire supports render it especially desirable for porch work, while its peculiar purple flowers are borne abundantly with the unfolding of the leaves.

For covering brick walls use English Ivy (Hedera helix) or Japanese Creeper, formerly known as Boston Ivy (Ampelopsis tricuspidata) or Engleman's Creeper (Ampelopsis quinquefolia Englemanni). All three cling and cling hard. Clematis paniculata, too, does as well in the South as farther north.

Dutchman's Pipe forms a dense shade during the summer with its broad heart-shaped leaves, shingled as it were to the vine; and American Bittersweet (Celastrus scandens), is better than the Japanese cousin because its showy fruits are borne in clusters long after the foliage has dropped.

I must not forget two especially effective vines: the Everblooming Honeysuckle (Lonicera Heckrotti—seemingly a hybrid between the Coral and Trumpet and Dutch Woodbine Honeysuckles) never out of bloom during the growing season, bearing showy clusters of deep purple and red flowers; and secondly, the Carolina Jessamine (Gelsemium jasminoides) a delightful native evergreen climber always ready with the first warmth of spring to produce its long leafy festoons of delightfully fragrant and showy yellow flowers.

Of annuals, Morning-glories thrive wonderfully and nothing outside the tropics can compare with the Big Blue and its white-edged variety in their cerulean hues. The Scarlet Starglory (Quamoclit coccinea) shows its full splendor of wonderfully effective, fine-cut foliage with brilliant flowers; but so far as my experience goes Nasturtiums do not like other than a comparatively cool climate for best results.

There is a world of good native material in the Mid-South in vines which are yet to be offered in the trade, and I have purposely omitted some things which, such as the Japanese Honeysuckle, have become weedy pests and almost unfortunate introductions, and therefore should not be encouraged.

VARIOUS HEDGES FOR THE REGION

I AM coming to believe that the hedge habit is a curse to our horticulture because so many hedges have no definite purpose. Either the tree agent is disposed of by buying the cheapest thing he has to offer, or perhaps, since hedges are cheap, the thoughtless purchaser is led into the habit of putting in a hedge because his neighbor has and letting gardening effort stop with that. Then again, hedges, if improperly set and afterward uncared for, soon become untidy and detract rather than add to any surroundings.

Where really needed, however, hedges are a very useful adjunct, and what kinds are best for the South is our immediate consideration.

In the first place California Privet (Ligustrum ovalifolium) is of no use below the Virginia and Tennessee line; it does not hold its foliage during the winter, and there is no excuse in the South for a hedge that is not evergreen. The Chinese Privet (Ligustrum sinensis) erroneously known in this region as the Amoor River Privet is a perfect substitute, evergreen, easily transplanted, and adapted to any kind of pruning. The only drawback is that it is too constantly used for hedge purposes, whereas there are other types of evergreen plants which give needed individuality and variety. Where rapid effect is compulsory use Chinese Privet and plant it wider or closer together according to the nature of the hedge effect desired. For an ordinary hedge, presumably to be kept at a height of four feet, set the plants one foot apart; and a perfect low, dense, box-like hedge can be kept down to a height of ten inches for twenty years if the plants are set in double rows six inches apart and the plants in the rows two inches apart. The extreme in the other direction is to set the plants as single specimen shrubs six feet apart and they will grow to fifteen feet in height.

Privets are, in general, a most useful group of shrubs and pleasing variety can be obtained with other evergreen forms such as the Glossy Privet (Ligustrum lucidum) a low-branched, true evergreen with broad, leathery, glossy foliage. Though a bit slow in responding to transplanting, it makes a sturdy dark green hedge which may be closely pruned. Hardy to Washington (D. C.), its seedlings vary considerably in habit of growth and richness of foliage, but selected types are propagated by nurserymen and will give a perfect hedge of unchanged character throughout. Then the true Japanese Privet (Ligustrum japonicum) forms a strict upright hedge with broad, oval, glossy green foliage and is dependable pretty well south, but north of Raleigh or Greensboro (N. C.) sometimes winter-kills.

The glossy Abelia (Abelia grandiflora) is one of the good things which is being used for hedge purposes; easily propagated, almost constantly in flower, from spring to fall, low and densely branching, with evergreen, glossy pointed foliage and of comparatively rapid, graceful growth. Its faults, if they can be so considered, are its coppery hue in winter and rather persistent and not alto-

Azalea, Live Oak, and Cedar in the beautiful old garden established some two centuries ago by the Middletons of South Carolina *(see pages 165, 167)*

gether tidy seed-pods. It is a welcome relief from the ever-present Chinese Privet.

Soon the value of the Yaupon (Ilex vomitoria) for Mid-South purposes will be recognized, and this plant will be used by those not looking for something cheap merely, but a hedge that will combine the necessary characters of hardiness, small foliage so as to admit close pruning, comparatively rapid growth, and brilliancy of fruit effect. Its intensely scarlet, densely clustered, small berries are held by the plant throughout the winter, only falling with the commencement of growth in the spring. The leaves are narrow, slightly toothed and closely set to the branches, and the growth is the most rapid of all the Hollies. In spite of a general impression that it is difficult to transplant, I have had no trouble when the roots are firmly set and proper pruning back has been done.

Among other desirable hedge materials is the English Laurel, which makes a broad-leaved, leathery, thick foliaged hedge that needs and had better have little pruning. Of Evergreens, curiously enough, the Hemlock (Tsuga canadensis) is wonderfully happy even under sandy conditions quite generally throughout the Mid-South; and the common Red Cedar (Juniperus virginiana) admits of close hedge planting and takes to pruning kindly while the Oriental Arborvitae (Thuya orientalis) flourishes in the region under all conditions of soil and exposure.

Do not use Japanese Barberries or Lilacs in the sandier or hotter regions hereabouts, for they will not succeed. Spiraea Thunbergi does exceedingly well and Spiraea Reevesiana and S. Vanhouttei are on the whole satisfactory, but we are treading on deciduous grounds and personally I can see no excuse in the South for a hedge devoid of foliage in winter.

EVERGREEN SCREENS AND OTHERS

ON GENERAL principles the best high screen planting for the South is Red Cedar (Juniperus virginiana) which is indigenous everywhere and can, with skilful care, be transplanted of any size to forty feet, and can be handled any day of the year! As proof of this the Duke grounds at Charlotte (S. C.) is a most creditable example. I cannot understand the thought of a screen in the South except in terms of evergreens; which may oftentimes well be enlivened with deciduous materials to give variety and flower effect. But the characteristic natural forest and landscape effects of the region furnish a safely followed keynote for gardened areas.

For coniferous variety use Hemlocks and Oriental Arborvitae; and except for such regions and conditions as call for the use of the Long-leaf and Rosemary Pines, stop. You can use White Pines in the cooler regions of this section and the Bhotan Pine succeeds even better. The Deodar Cedar, of course, for individual planting, and Cedar of Lebanon, too, is fine, but we are talking just now of screens, which mean less costly plantations.

There is a good sized list of broad-leaved evergreen material. The American Holly (Ilex opaca), Southern Magnolia (Magnolia grandiflora), Carolina Cherry-laurel (Laurocerasus caroliniana), Japanese Privet (Ligustrum japonicum) combine variation in habit, foliage, and flower effect and can be diversified in combinations to give proper individuality to a screen planting.

REMAKING A HOMESTEAD

MARY HARROD NORTHEND

Merging Colonial Spirit and Modern Comfort into a Graceful Whole

THE farmhouse stood on rising land under the shelter of stately trees by the side of a merry gurgling brook from which it takes its name of "Crest Brook." It had a most homeless dilapidated air—the windows a target for every passing boy.

Still it was well worth trying to restore as there were good lines, and the location counted. It stood facing the cooling summer breezes and the situation suggested easy drainage by which to carry off the spring floods without washing away the ground. Also the nearby brook offered opportunity for introducing water into the house without excessive cost. There was one chimney only, but a large one, such as was often introduced in the middle of the eighteenth century. Its generous proportions gave promise of large fireplaces inside. There was no trace of sagging in the roof, that tell-tale part of the house which reveals to the experienced eye whether or not the underpinning is decayed.

The frame was of white pine, a long-wearing wood which endures the stress of centuries without decay. A pitch roof coming well down over the first story windows, a wide overhang protecting the rooms in the upper story from the glare of the sun definitely proved its age, while the small-paned windows added much to the charm of the home.

There is an innovation, in fact two of them, that bespeak good taste. A modern day porch in Colonial manner to break the long line of the front and a veranda cunningly contrived at one side to act as an out-door living room.

All these factors have aided the architect in creating a charming example of a remodeled farmhouse. The shingled roof is rapidly mellowing into the silver gray of former days. Clapboards have been used on the exterior, which has been painted white; and green blinds have been hung to accentuate the Colonial effect. The grounds smoothed and leveled, shrubbery scientifically planted, stretches of trees grouped together make a delightfully simple and suitable setting.

Inside also, the original spirit of the dwelling has been fully kept. A long hallway leads, at the right, into a long parlor showing the old paneling, fireplace, and H hinges on the closet doors. This fourteen by twenty-seven foot space was originally taken up by the kitchen, a bedroom, and living room combined. The low stud of the room adds much to its restfulness and the old-fashioned interior with the large open fireplace is delightful. Here a crackling apple wood fire spreads its cheer on frosty nights.

In the dining room, period studding has been carried out; the wall finished in white pine stain, original beams left untouched. This dining room is 12 ft. 9 in. x 21 ft. 6 in., showing low stud 7 ft. 4 in. In one corner an old-time china closet finished with a keyed arch, so popular in great-grandmother's day, has been introduced. This room is well lighted by group windows hung with dainty white muslin drapes and every part of it has been carried out in sympathetic manner, even to the Windsor chairs which form a suitable grouping around the gate-leg table, and the dresser with its display of rare china.

The chambers on the second floor are all of uniform height, 6 ft. 10 in. The floors throughout the house are finished in polished hard wood which show to advantage the pulled rugs that cover them. Several baths have been installed, but they are the only obviously modern note in the various skilfully made improvements.

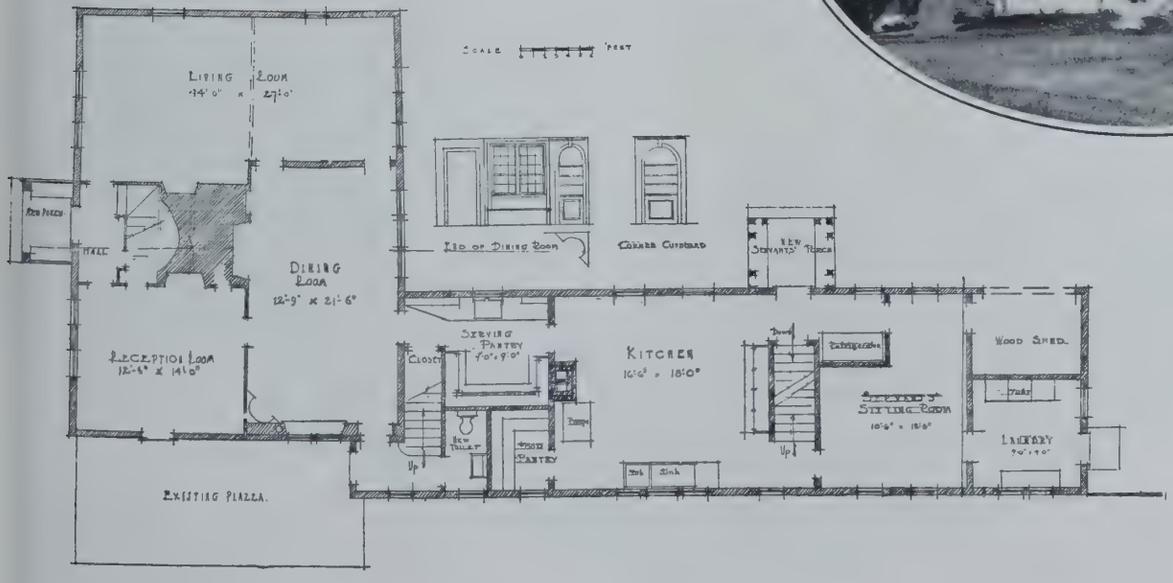
The dining room at "Crest Brook," Norfolk, Mass., is delightfully reminiscent of bygone days and refreshing in its simplicity (details described above)

The Homestead at "Crest Brook"

Norfolk, Massachusetts

Restored by Lois L. Howe & Manning

Photographs by Florence Maynard



The mere matter of an interesting doorway and porch treatment adds new friendliness to the old house, as will be seen on comparing the view in the small oval with the larger picture of the remodelled house above

VINEGAR AND CUTTINGS

SOMETHING REALLY NEW IN PRACTICAL GARDENING

T. A. WESTON

Editor of the *Florists Exchange*

How to Root Cuttings Quickly and Get 100 per cent. Strike with Violas, Phlox, Chrysanthemums, and Other Garden Plants

WHILE it is generally accepted that the majority of cultivated plants are happier in a neutral or alkaline soil than in a more or less acid soil, yet it is an open question whether the general run of plants actually require an alkaline root medium. Many gardeners are prompted to use lime in considerable quantities year after year, without proof that their soil needs it. While it may be necessary to apply lime to soil that is sour through constant manuring, there is a considerable difference between sourness and acidity; in fact it is quite possible for an over manured soil to be strongly alkaline.

It is a common policy to use abundance of lime for such subjects as Carnations, Sweet-peas, culinary Peas and various other legumes such as Clovers, yet experience proves that acid phosphate is particularly useful for Carnations and many other subjects; bone-meal for Dahlias and other bulbs; while legumes and Potatoes appreciate, and are less disease ridden, when the ground is treated with sulphur.

I AM favored, or hampered, by having a garden that is wholly virgin soil, the only crops it ever bore being trees, brambles, poke-weed and similar wild ground cover. Leaf soil from the woods, chicken manure from a score of hens, a bag each of bonemeal, acid phosphate, and gypsum; and a few pounds of nitrate of soda and sulphate of potash are the only applications of a fertilizing nature over a period of four years, this on a patch scarcely 100 by 50 ft.

Acid soil? Not a doubt about it, although I have never had it tested! And yet practically everything grows amazingly. Why? Simply because the ground has been deeply dug, about 2 ft. deep, and is cultivated as well as watered fairly freely in dry periods, thereby ensuring complete aeration. Friendly neighbors had assured me that the soil was too light to allow success with Sweet-peas, English Primroses, and English Violas. But—Primroses are as happy as in England, or will be when once I can eliminate the black millepedes and night caterpillars that levy toll upon their roots and foliage in spring and summer. At

the end of August the Violas were still a mass of bloom, especially Jersey Gem. This was never out of flower from late May on, while the bedding types were only discouraged because the growths had been cut back to induce the formation of basal cuttings.

Last fall I made almost 100 per cent. strike with Violas, several thousands of them, not in the orthodox sand bed, but right in the open ground with nothing more than slatted sash above to protect them from the hot sunshine. And the reason? Just common sense methods in producing the cuttings, *plus acid!*

ACID as an aid to propagation is no invention of my own, although I was perhaps the first to discuss it on this side of the water, in a florists' trade journal, some fifteen months ago, presumably so inefficiently that its value is still practically unknown.

The first suggestion as to the need for acid at the base of cuttings was made by the late Prof. Bailey Balfour of Edinburgh, prompted by a reference as to acid root and alkaline shoot in the "Textbook of Botany" written by Prof. Small of Belfast. As may not be well known, the Edinburgh Botanical Garden has the only recognized school for propagation; its staff includes veritable wizards in the propagative art, but they had always found certain subjects difficult to root from cuttings. Tests proved that applied acid to the propagating medium enabled them to root Oak cuttings in two or three months instead of about ten.

To create acidity Prof. Balfour first used a peat-solution, but to avoid any possible benefit from the peat, he then used white vinegar (acetic acid). Three teaspoonfuls of white vinegar in a gallon of water is the equivalent of 1 part of acetic acid in 10,000 parts of water. The solution was used both warm and cold. Chrysanthemum cuttings given the warm solution (about 80° to 90° F.) were rooted in a week, 100 per cent.! Rhododendrons were calloused in three months, while those given plain water showed no sign of movement. All other subjects tried out showed quicker and more certain rootings.

Prof. Small attributes the difference in reaction at opposite ends of a cutting, as due to the difference in the carbonic acid gas (CO_2) balance, basing this upon tests made with Aucuba cuttings kept in water, into which CO_2 was blown weekly for a month. Roots appeared far more quickly than on cuttings kept in water merely air blown. Now what's the use of all this to the ordinary gardener?

FOR ordinary purposes the sand or soil used for inserting the cuttings can be watered with the vinegar solution, the cuttings being set out as soon as the surplus liquid has drained away. The solution may also be applied after the cuttings are inserted, but it is then advisable to water with clear water afterward as the acid is liable to injure the foliage of soft subjects. On benches of sand more than one application of the liquid may be needed, but with hardy stock such as Violas, Pansies, Phlox, etc., which are set out in frames with just a layer of sand on the soil, I have found one acid watering sufficient after the cuttings are inserted.

In passing, it is also of interest to note that tests at the New Jersey Experiment Station prove Carnation cuttings can be more expeditiously rooted by treating the sand with permanganate of potash. This, too, is acid. The amount of permanganate used by Chas. H. Connors, who carried out these experiments, was 1 in 1,000 parts of water, the solution being applied to the flats or propagating bench before the cuttings were inserted.

Won't some of the GARDEN MAGAZINE & HOME BUILDER readers try out the vinegar method of rooting cuttings? It is very little trouble, and may have big results.

NEWER GARDENS OF THE "NEAR SOUTH"

WARREN WILMER BROWN

Assistant Director of the Baltimore Museum of Art and for many years Literary and Dramatic Critic on the Baltimore "News"

The Merging of Modern Fashion with Traditional Flavor and the Making of Gardens that Really "Belong"—Plants Which Hold Their Place Under the Trying Conditions of the Southern Borderland

A DOMINANT characteristic of what might be called the "Near South"—Maryland is its frontier—is the desire to keep up with the present time without losing sight entirely of the old. This dovetailing of modernity and antiquity, apparent on every side, is particularly noticeable in the changes that have gradually crept into gardening methods during the last decade or so. Judging the whole situation by its better manifestations, one comes to the conclusion that the transformation is proceeding in accordance with a thoroughly sane and well-thought-out plan; that it is based upon a permanent aesthetic ideal instead of being at the mercy of every passing fad. The results, generally, are stimulating and very often they are striking from the standpoint of imagination and as expressions of individualism.

For a time a smirking and complacent self-consciousness prevailed. It might have grown up into a full-fledged Narcissus complex (using the term in its psychoanalytical rather than its botanical sense) had precedent been consigned to the winds over night. As a matter of fact this tendency is rapidly disappearing and our gardens, like our houses, are learning, so to speak, how "to live their own lives" without boasting about it in more or less outré terms. Hence, one is nothing like so apt as a few years ago to see gardens that seem positively strutting with pride over the fact that they had killed old-fogyism.

In some places that have an established garden tradition of their own—Hampden, the superb Ridgely estate near Baltimore, occurs as a salient example—things are allowed to remain pretty much the same as they have been for generations. This refers chiefly to the original scheme, for even the most conservative and reserved of them are bound, sooner or later, to adopt modern innovations, if in no other guise than the latest hybrids of the reliable stand-by perennials.

THE passing of the big old homesteads contiguous to such cities as Baltimore and Washington has brought about, in this section of the country, particularly conspicuous changes—changes not so much in garden practice perhaps, as in garden procedure. That is, many of the ancient materials are used but they are handled in an entirely different manner.

These tracts are being converted into re-

Showing Lady Gay Roses encircled by Barberry; H. Clay Primrose, Landscape Architect

GARDEN OF MRS. EDWARD MURRAY AT ELKRIDGE, MARYLAND

stricted suburban districts and the plotting of such of them as are designed to attract wealth and fashion is usually entrusted to professionals. It would, then, be very curious indeed, if they did not bear the marks of modernism very strongly. For one no sooner expects a contemporary landscape architect to revert, without strong duress, let us say, to the obsolete terms of his ancestors, than one looks for canvases in the Cole or Wyant manner from an up-to-date painter. But the wise artist, no matter what his medium or period, knows that certain rudimentary rules must be observed. So it is that the gardens hereabouts which best realize a broad aesthetic ideal and which seem most truly "to belong," are those whose plan is based upon a technique that has been thoroughly tested and proved fundamental in so far, at any rate, as the local state of affairs is concerned.

MARYLAND gardens seldom justify the term "impressive" in the sense inferred when the great European examples are mentioned. There is seldom anything imposing about them, but they know how to be dignified and at the same time exert a persuasive and very personal charm. Period gardening and imported ideas are usually given a wide berth and there is greater preference for informal than formal plans. Once in a while individual preference for the Italian, Japanese, or other foreign style crops up, but the broad drift is to make the gardens reflect the spirit of their locality.

There is a lively and appreciative desire to retain architectural details and landmarks that have beauty as well as age to make them worth saving. Sometimes an entire scheme is altered at great expense and trouble to make such a survival its dominating motif. One of the finest specimens I know is an exquisite century-old Grecian temple in a miniature park in Guilford, Baltimore. Aphrodite herself might cherish it as a shrine, whereas it was built as a spring house! Such lovely fragments of the past as this—and Maryland and northern Virginia abound in them—have done a good deal to determine the direction and character of the architecture chosen for our gardens.

This influence has not brought about, as might have happened if progressive ideas were less to the fore, a classic revival. What it has effected is to center attention upon the value of simplicity, purity of line, and the necessity for keeping problems of scale in mind. It has also increased consideration for composition as a primary essential, since the old buildings with their outlying decorative objects were nearly always cunningly placed. They tell more at a glance about the secrets of balance and relative dimensional values, and possibly about tonal arrangements, than a bale of blue prints. Pergolas are maintaining their popularity, but they have abandoned their aimless disposition. They now customarily lead somewhere, even if it be only to a comfortable garden seat. Some of them are merely collonades of rough cedar posts supporting lighter timbers across the top; again the posts are of cement with irregular wooden beams. The all-cement structures are becoming passés.

Treillage, in the newer gardens, is as rare as a pleached vista or a box maze, though simple lattice work often relieves the severity of arches, summerhouses, and arbors made of dressed pine or cypress. The main objective is to obtain simplicity and strength in the supporting framework and to make beauty depend upon the vines that cover it.

The things used for this purpose include the splendid new climbing Roses: Clematis, notably Jackman's and paniculata, and, more rarely, Mme. André, Pueraria, Actinidia (how many have even so much as seen the "edible fruit" the catalogues mention as one of its virtues?); Wisteria, Bignonia and Coboea. Ampelopsis, Euonymus, and the common Bittersweet are seen more frequently as wall coverings than is English Ivy, except in old gardens. Now and again a Cinnamon-vine is spotted. Ugh! For to me Dioscorea batatas—even the name is odious—is reptilian, nothing less. In an unguarded, mad moment I once planted a root of it and in less than a year it had bombarded my garden with tubers, every one of which took root and devastated right and left. Is it any wonder I loathe even a thought of the Cinnamon-vine?

The climbing Roses are quite the prima donnae of the group sought for screen and tall decorative effects. Not the troublesome progenitors of the race— Crimson Rambler, Philadelphia Rambler and lately, Dorothy Perkins, which in this climate have a fatal weakness for mildew, but their posterity. Silver Moon, Hiawatha, American Pillar, Climbing American Beauty, Christine Wright, Dr. Van Fleet, Aviateur Blériot, Excelsa, Tausendschoen and Paul's Scarlet all flourish gloriously. It is hard, indeed, to keep some of them within bounds. Silver Moon, for instance, if given the slightest encouragement, makes a wilderness of itself in a few years.

THE question of paths, walks, and roads is being given close study from the standpoint not only of substance but of color and, naturally, design. Flag-stones are, literally, gaining a sounder footing every day. Here again the trend is away from pretention and the ornate. For one costly and elaborate walk, you will find a hundred consisting merely of a succession of irregular stepping-stones—what we call "niggerhead" is admirable for the purpose—placed in straight or curving lines, as the case may be, and with a definite destination in view.

Speaking of cement, Maryland gardens are full of sun-dials, bird-baths, and pools. Of pools there are endless types, from diminutive lakes on estates lucky enough to own streams, to the affair just big enough for a couple of goldfish and a Water-hyacinth. Most of them are sunken, but there are pleasant variations by way of above-ground pools of firmly cemented field rock finished in naturalistic fashion.

The modern urge for decorative garden sculpture has made itself distinctly felt in the gardens of the South's borderland. Comparatively few estates are sufficiently large or are laid out in a way to justify heroic figures, those most in demand being small bronzes in the round, dainty embodiments of myths or purely imaginative ideas. One comes across them in nooks where they have the air of evoking the sylvan deities, or else they are discovered as the resident genii of pools. Reliefs serve a happy purpose as details of dials, bird-baths, or wall-fountains.

The dooryard gardens of a hundred years ago have left bright and vigorous descendants in foundation plantings, in ornamental shrubbery groupings, and herbaceous borders, all used as entrance plot features when there is room. Residences built too close to the street to allow this treatment, recall the old custom of having a bit of freshness and beauty at the very door, with their porch and window-box displays. These are chiefly confined to outlying urban districts, but they are also playing a delightful and an increasingly important part in dispelling the dulness of city life.

There is one antique garden feature of which there remains scarcely a trace—the herbarium. It seems to be as extinct almost as Henry Ford's hope to have the boys out of the trenches by Christmas.

THE evergreen tide is flooding the "Near South." It has been rising for several years and now that its early effects are making themselves so very conspicuous, there are signs of an effort, if not to stay it, at least to use a little common sense in its control. The fact that house after house, which had views for miles around when their first conifers were put in, are now set in the midst of impenetrable forests has been a great stimulus to caution. The more recent evergreen plantings are much improved, in regard to matters of spacing, color, and light and shade.

Apropos of Box, it has made its re-entrance, but not to take part in any such complicated figures as it used to execute in the gardens of earlier times. Its present mission is principally to edge walks and roads or to offer its dark and opaque masses as a background for gay blossoms. Box is more exacting in its needs here than it is a little farther south, as the foliage is likely to be damaged in winter unless care is taken to keep it free of snow, either by covering or brushing. Looking at Maryland on the map, one might suppose it occupies a strategic climatic position. Truth to tell, the weather conditions justify a stronger adjective than trying, especially during the cold months. It is no uncommon thing to lose valuable trees, shrubbery, and perennials through constant thawing and freezing. Allowance for probabilities, study of improvements in protective means, tireless observation, extra care in the selection and testing of botanical varieties: precaution and common sense, in a word, are about the only weapons available for overcoming this difficulty.

Only in certain localities of Maryland is the earth naturally free enough of lime for Rhododendrons and Azaleas, but that does

A PLEASANT SIDEWALK PLANTING IN ROLAND PARK, MARYLAND

not discourage the enthusiast wealthy enough to give his hobby full rein. He sets about "doctoring" the soil to the right degree of acidity, so that it is often difficult to tell whether the plants are growing under natural or artificial conditions. Not that it makes a particle of difference; to the observer, at any rate.

People with plenty of ground at their disposal are obtaining fine success in the naturalizing of the hardy bulbs, especially Narcissus and Crocus. Tulips and Hyacinths are receiving similar treatment but chiefly, I fancy, from people who have the mistaken belief that these flowers suffer by being lifted every spring. It is a belief that saves a lot of trouble, anyway. The Tulip is almost as much of a craze in our corner of the universe as it was in old Holland. The Darwins and the Breeders, which usually start blooming a week or so after the annual Easter blizzard, are dazzling demonstrations of the modern hybridizer's palette.

The bulbs, as a rule, are set in clumps among perennials or are given borders to themselves. care being taken, either way, to design for color rhythm. Parterre and geometrical plantings of these or any other flowers is not attempted by any non-atavistic gardener who is really convinced he is living in the twentieth century.

The epidemic that blistered fine lawns with round beds of Cannas, Castor-oil-beans, and Elephant-ears; that slashed them with hideous designs and that made them repulsive with carpet bedding—this scourge of beauty has about passed. Probably no germ of it at all would remain if municipal Park Boards could only be made to realize that Victoria Regina is dead.

IF MODERN methods and ideals of gardening have transformed our country and suburban landscapes, they have been so revolutionizing in city districts that often a neighborhood can hardly be recognized after a few years' absence. Baltimore particularly is in mind. It hung on to its ugly high wooden fences longer than to most of its heritages. Finally the people, opening their eyes to the possibilities they were missing, began to pull down the tottering bulwarks. There was a general cleaning up, inconspicuous wire fences were erected, if any at all, and in a short time "interior parks," some of them extending for blocks, were scattered all over the city. Too much praise cannot be paid the Women's Civic League of Baltimore for the part it has taken in this general work; and property beautification is also much indebted to the energetic activities of the many garden clubs.

There are hosts of gardens devoted to this or that flower—Iris, Peony, Dahlia, and so on. Few are foolhardy enough to go in lavishly for the Japanese Lilies which are quite as undependable here as elsewhere. The elegans types do very well and so do the candidums, most of the time, though they are not above contrariness and eccentricity.

Rock gardens distinguish a number of estates, one of the most noted being that of Mrs. Henry B. Gilpin at Milwood, Virginia, and the current fondness for specialization finds further outlet here and there in water gardens. The big pool and its surrounding tanks in the experimental garden of the Johns Hopkins University, and the Nymphaea and Egyptian Lotus pools in Clifton Park, both in Baltimore, attract many visitors all summer.

Possibly as a consequence of the gorgeous springtime spectacle of the Japanese Cherries around the Speedway in Washington, these trees are being planted in increasing numbers in the larger gardens. Their period of bloom makes them, as it were, a prelude to the rhapsody of the pink and white Dogwoods, of which there is a great abundance.

So far as success in the massing on a large scale of flowering trees and shrubs is concerned, I know of none finer anywhere than that achieved by Mrs. Edward H. Bouton in her Roland Park Garden. In its entirety Mrs. Bouton's garden is an ideal example of the solution of a difficult and peculiar topographical problem in terms of the modern standards of beauty.

Another famous Maryland garden is that of Mrs. Edward Murray at Elkridge. It was started by Mrs. Murray a number of years ago with the object of making it suggest a Gothic cathedral and it is now reaching a rich maturity.

The Garden Theater at Woodhaven

near Atlanta, Georgia

Home of Mr. & Mrs. Robert F. Maddox

MEDORA FIELD PERKERSON

Photographs by Reeves

PROVIDENTIAL accident was the inspiration of the spectacular treatment of the garden theatre at "Woodhaven." Twelve years ago it was a great, ugly hole in the ground dipping down from the side of the present site of the house. The solution was worked out by Mrs. Maddox experimentally.

"We had no idea," she explains, "just what we would do about that awful hole, but set out to beautify it gradually. First, of course, we had it terraced, to prevent further washing, then sodded, and kept on adding one thing and another as it seemed to be required." Thus, step by step, and without definite consciousness of direction, an outdoor amphitheatre was developed, with a seating capacity of no less than 600, and here some of Atlanta's most beautiful outdoor pageant have been staged.

The classic motive inspired the whol creation, and tall marble statues, representin the four seasons, guard the four pathway leading from the fountain and up between th terraces. These statues were carved in th seventeenth century and until a year ago stoo in an old private garden in Florence.

There's another view from a summerhous at the top of an emerald hill, where you gaz down through a vista of cone-shaped Cedars– the loveliest place for twilight contemplation

Not a day in the year of this balmy South ern climate but there are blossoms to mar the calendar. Mrs. Maddox has brough home and naturalized plants from almos every part of the world.

A JAPANESE GARDEN IN TENNESSEE

SADIE A. FRANK

Photographs by C. Wechsel & Co. and R. S. Patterson

Converting a Mud Hole into a Pool of Enchantment—Gaining an Oriental Effect by the Understanding Use of Native American Plant Materials

IT IS full of peace and silence and a sense of everlastingness. This is the impression of a simple little water garden that originated out of a mere mud hole. It is a Japanese garden luxuriating in Centennial Park at Nashville, Tennessee, and is as accurate a working out of Doctor Conder's book on Japanese work in Japanese gardens as could be achieved with American flora.

The effect is restrained. The foliage planked against the drooping Willows; the formal Egyptian Papyrus, undoubtedly one of the motifs of the Egyptian column; the blunt projections of the graceful Lotus that surmount the water-beds—all these are the result of years of study to attain an Oriental effect in an Occidental garden.

Mr. Clarence P. Connell, Superintendent of the Parks at Nashville, in studying and working out his designs, found it expedient to make all the decorations of native Tennessee material. He himself modelled the eight Japanese lanterns in concrete; not concrete of the usual type, but that of such texture as to most closely imitate old worn granite. The Buddha was wrought from Tennessee granite by a Nashville boy who is now studying at the Beaux Arts in Paris. He is Paul Eldridge Shwab, only twenty years old.

Wherever native wild flowers could be transplanted, they have been used. The garnet of the Iron-weed blends with Begonias and

POD OF LOTUS (above left)
PAPYRUS LEAF BUD (above right)
Plants long known to the Oriental peoples and frequently found as motifs in the art and architecture of Egypt in especial

THE GARDEN AS IT IS TO-DAY

Both Lotus and Papyrus have been successfully introduced, though most of the distinctly Japanesque effect has been achieved by the discriminating use of native plant materials. (Compare with view on following page)

Calladiums. Horsemint, Arrowhead, Cat-tails, and Asclepias crowd in the banks surrounding the pool at whose edge grow Iris pseudacorus and various other species of the Bearded group. There is also an unusual collection of water-growing Japanese and Siberian Iris.

On the south, the rock garden is a mass of Alpines and Mallows. Away to the west is an unexpected cave. Rough jagged blocks of native stone are piled into a picturesque, seemingly nature-born cavity. The hydrant entrances are so concealed by skilful piping that the brook

THE POND BEFORE ITS CONVERSION

Where Willows, Cat-tails and other native plants formed a fine initial setting and lent themselves readily to the Japanese scheme of planting *(see preceding page)*

appears to be liv water.

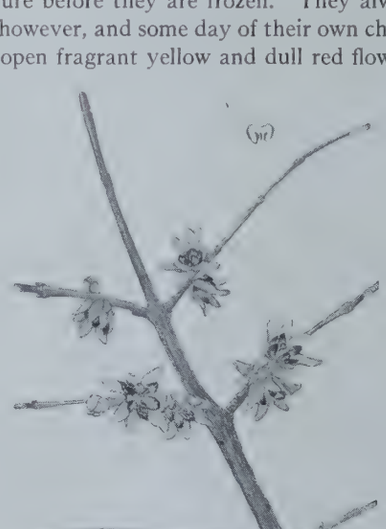
Within the pool both day-blooming and night-blooming Water-lilies (Nymphaeas) peer at th white and pink Lotu (the Nelumbiums) Mr. G. B. Moulder the gardener for Cen tennial Park, a wizar at propagating an hybridizing Water lilies, gave royally o his largest an healthiest plants. Fo many years Mr Moulder collaborate with Mr. Guerney Sr., of St. Louis, i Water-lily breeding The best of these many of which hav never been in com merce, lie in the Japa nese garden—a mu hole wrought into pool of enchantment

A Sweet Flower of Winter

B. Y. MORRISON

THERE is certainly a distinct and peculiar pleasure to be found in the last flowers of autumn and the first flowers of spring. Quite apart from the pleasure of a prolonged flowering season, one rejoices in the hardihood, the bravado perhaps, of these choice spirits.

The last flower to open for me is always the Winter-sweet which blossoms in late November even after the Witch-hazel has hung out its tattered petals. Like the Witch-hazel, it is not a showy shrub, is not one to commend itself to the gardener who is planning his garden for display. In my garden it forms a bush about five feet high with rather spreading branches. As the situation is shaded and as the plant prefers an even warmer climate than ours (in Japan, the land of its nativity, it flowers in December), this stature may be far from its maximum. The leaves are rather large, very rough to the touch but of pleasant appearance, turning yellow before they fall. The flowers are borne on the lateral shoots produced in spring on the canes thrown up the year before. The buds appear in late September or early October and seem to develop so slowly that one feels certain they cannot mature before they are frozen. They always do, however, and some day of their own choosing open fragrant yellow and dull red flowers.



WINTER-SWEET
(Chimonanthus fragrans)
Showing the characteristic growth of this fragrant late flower in autumn tones of yellow and red

The perfume is not strong out-of-doors or a least does not pervade the garden but, brough into the house, a small spray will fill a roo with its delightful scent.

Certainly every garden where fragrance i cherished should have a Winter-sweet, know in catalogues both as Chimonanthus frag rans and Meratia praecox. It is hardy through the South and has done so well her that one might venture it in Philadelphia o even in sheltered spots on Long Island.

SO OFTEN formidable at first blush, flowe names, when we take the trouble to ferre out their origins, sometimes assume new meaning and new beauty for us. Certainly it is fascinating to discover how they link up with other peoples and lands—little link seemingly so fragile and yet imperishably binding far-divided continents and centuries Sometimes they bear the name of their dis coverer, sometimes their country's name, bu oftenest, perhaps, some title quaintly de scriptive of their own idiocyncrasies an habits as in the case of Chimonanthus, de rived from the Greek *cheimon,* winter, an *anthos,* a flower.

SOUTHERN SHRUBS FOR NORTHERN GARDENS

E. FRED ROWE

Photographs by W. A. Roberts Film Co. and courtesy of J. Van Lindley Nursery Co.

Some Evergreens and Flowering Plants that Will Bring Variety and a Touch of Sunny Climes

SO LITTLE is spoken or printed about the garden plants of the Southern States that a discussion of them is likely to make some Northern gardeners lift their eyebrows in surprise—or doubt.

Many plants that are well known in the South are rarely seen north of Washington, because, "they are not hardy; the first round with Jack Frost usually puts them out of business, and if this doesn't finish them Old Man Winter drops down on them and the plants are ready for the rubbish heap."

That, however, is not true of all the good plants of the South. Just a few years ago the Lobelia was thought to be a warm climate plant only; to-day there are many fine specimens in the gardens about New York. The evergreen Photinia (P. serrulata), the Japanese Fetter-bush (Pieris japonica), the Holly-leaved Olive (Osmanthus aquifolium), and the Japanese Nandina (N. domestica) are only a few of the lovely Southern shrubs that can safely be grown in the latitude of Philadelphia.

JAPANESE NANDINA (N. domestica)

A lovely broad-leaved evergreen shrub, with reed-like stems often 6 or 8 feet long, whose chief claim to beauty lies in the changing coloring of its foliage (described in the accompanying text)

A NEW SUPPOSED HYBRID HONEYSUCKLE

This as yet unidentified Honeysuckle, related to L. Heckrotti displays a wealth of flower throughout June, scattering bloom all the summer; and in late fall, just before frost, again breaks into full flower

The Nandina—a lovely broad-leaved evergreen shrub, with reed-like stems often 6 or 8 feet long—is reported to have withstood zero temperature in the mountains of North Carolina. Its claim to garden beauty lies in the changing coloring of the foliage; when the leaves first unfold they are a rich deep crimson, but as time goes on the crimson turns to dark green, as glossy as though covered with a coat of wax. Then, when the cool days of autumn come, the mature leaves take on tones of copper, and remain on the plant all winter. The flowers are rather small, but the snow-white purity and the great quantity of bloom overcome this criticism. Brilliant red berries come soon after the flowers fade.

SOME months ago while wandering around a Southern nursery I ran across a new variety of Honeysuckle. The original plant was discovered four or five years ago, but little attention was given to it because of the close resemblance to L. Heckrotti. After a year or two, and during the blooming season, it fairly forced itself into the limelight, and the nurseryman began to propagate a few plants. But in all probability it will not be introduced to American gardens for two or three years.

Specimens were sent to several botanists and horticulturists, but thus far the new variety has not been identified. One well-known botanist said: "It represents a form unknown to me; it looks somewhat like Lonicera Heckrotti, but it is certainly different and is

CRÊPE MYRTLE
(Lagerstroemia indica)

One of the most conspicuou of characteristically Souther shrubs, during midsumme months like a great bouque rosy or shining white, near t doorstep of most homes in t South. Both the house an Crêpe Myrtle tree pictured he are over a century old; the Ca houn homestead on Tanner Creek, Norfolk, Virginia

without doubt a hybrid, possibly L. implexa x sempervirens."

This unchristened Honeysuckle has a wealth of bloom during the whole month of June, and in the South follows hard after the Spireas and Weigelas. It just fills the gap between the early and midseason shrubs; but in addition it carries some flowers all summer, and in late fall, just before frosts come, it again bursts into full flower. (See picture on preceding page.)

Another interesting point about this Honeysuckle is that it holds its foliage all winter, and is practically an evergreen. Other varieties either lose their foliage, or turn brown and become unsightly.

SOMETIMES a name seems to cast a hoodoo or spell over a plant and keep it from taking its rightful place in the garden or the border. A plant that survives the name of Ophiopogon spicatus, Ophiopogon japonicus, Snake-beard, and Liriope graminifolia, certainly has vitality! Botanists say it came from China, but the form of growth resembles the unkempt head of a Russian "Red" rather than the long queue of a Chinaman.

In spite of the trying name, Ophiopogon is a charming plant with grass-like foliage which grows in dense tufts. In early summer a multitude of lavender or violet-purple flowers are borne on slender spikes, like colored candles rising above the foliage. Southerners consider the Ophiopogon one of their finest perennials, blooming when most of the spring and summer flowers are gone. While this plant has been considered tender, and at home only in a comparatively warm climate, there is undisputed evidence that it has successfully weathered zero temperature.

AMONG the broad-leaved evergreens used for city planting in the South, is Aucuba japonica, or Japanese Laurel. The peculiar texture of the leaves makes them resistant to dust, smoke and gases, therefore the plants can be used freely in manufacturing sections. The broad foliage, which is a deep glossy green, develops best in partial shade. Like the human race, Aucubas are gregarious and thrive best in colonies and groups. Here the plants will bloom and produce many oblong, shining, scarlet berries.

To my mind one c the most conspicuou mid-summer flowerin shrubs of the South the Crêpe Myrtl (Lagerstroemia indica) Professor Bailey say that "it is to the Sout what the Lilac an Snowball are to th North." A Souther yard without one c two bushes is reall conspicuous because c the lack of color.

In habit of growth it may be compared t the Lilac—somewhat spreading and wit bloom-bearing branches clear to the ground The bark is so smooth that it almost seems t be polished.

Two varieties are quite common—one wit pronounced pink or blush flowers, and th other pure white. The individual flowe are half an inch or so across, fringed at th edges and borne in large panicles. Ur fortunately the Crêpe Myrtle cannot safel be grown even in well sheltered positions o Long Island, but a fine specimen used to b growing about the house of the late M Moon, nurseryman, across the river fro Trenton, N. J.

One might ramble on for several pages an then not name all the good plants that can b adopted from Southern gardens, and in a sho time made to feel at home in a Norther environment. If placed in a sheltered pos tion, given a heavy mulch of leaves, an possibly some stem wrappings, they will con through ordinary winters, and bring a touc of the sunny South to the mid-summer ga den.

A Way to Make Wisteria Bloom

ONE of my neighbors has a Japanese gardener and for several seasons I have studied the methods he employs to bring an especially vigorous Wisteria into bloom. This vine is an old one but it had few flowers, for all the strength seemed to go into growth. Root pruning, of course, is quite effective in cutting down rampant growth but this Japanese gardener employed the native strangulation method, fastening copper wire tightly around the main growth, thus reducing the flow of sap. His real work, however, and that which interested me particularly, was the pruning. He removed all the laterals where they were thick, leaving only enough to cover the space and give the growth a uniform appearance. The sublaterals he pruned in the summer, cutting them back to a dozen or so leaves to prevent them becoming a tangle. In the winter these were spurred back, just as you would handle a Grape vine. The result was that the vine bore quite a number of flowers the second year and in the third spring was a mass of blooms.—*J. A. C.*

Garden of Mr. George W. Clark at Jacksonville, Fla.

Nature does things so delightfully without any violent lines of demarcation, as here where Ivy and Ferns and Evergreens and other familiars of the North companion the Cycas, Palmetto, and similar plants of the tropics

Though they have nothing in common with a Palm except their general habit of growth, the Cycads are often designated as "Sago Palms." Known in the North only in greenhouses, and on porches in summer time, these plants grace Southern gardens with their beautiful curling growth so like some generous giant evergreen Fern

REPRESENTATIVE TULIPS FOR POPULAR USE

J. Zandbergen

This ready reference chart of varieties, carefully selected from the somewhat bewildering multitude of availabilities, represents the range of color and season in each of the leading sections and fully covers the possibilities of Tulip display for the gardener who craves the beautiful without the burden of paying collector's prices.

COTTAGE TULIPS

Name	Color	Height	Season	Size of Flower	
Bouton d'Or	Golden yellow	18	Mid	Small	Has the Darwin shape, black anthers.
Carnation	White, edged carmine-rose	18	"	Medium	This is the old English Picotee.
Fairy Queen	Rose-lilac, edged amber-yellow	25	"	Good-sized	Lasts very long in bloom.
Gesneriana Spathulata Major	Crimson-scarlet	27	"	Large	Very popular variety, black center adds greatly to its beauty.
Inglescombe Pink	Rose	25	"	Good-sized	Globular shaped, competing with Picotee.
Inglescombe Yellow	Glossy canary-yellow	23	"	" "	Gets often suffused with orange when in full bloom, sometimes called Yellow Darwin.
John Ruskin	Salmon-rose, edged soft yellow	19	Late	Large	Graceful stem, very popular.
La Merveille	Orange-scarlet	20	Mid	"	Deliciously scented, stem could be stronger, droops more or less.
Mrs. Moon	Golden yellow	28	"	"	Most beautiful of all, one of the few with a strong stem.
Moonlight	Soft canary-yellow	22	"	"	Most popular, strong stem.
Orange King	Deep orange, shaded rose	20	"	"	Stem could be stronger, droops more or less; sweet-scented globular flower.
Picotee	White, edged deep rose	24	"	Medium	Lily shaped; most popular of all Cottage Tulips; opening white-edged pink becomes almost all pink.
Solfatare	Sulphur-yellow	28	"	"	Very good bloomer.
Snowdon	White	18	"	"	There is not yet a really good white Cottage in commerce; not tall enough.
The Fawn	Pale rosy fawn	22	"	Good-sized	Darling of all who know this variety; one of the cheapest in cultivation. Passing into nearly white when flower ages.

BREEDER TULIPS

Name	Color	Height	Season	Size of Flower	
Jaune d'Œuf	Yellowish bronze	26	Mid	Medium	Good forcer, one of the best among the cheaper varieties.
Plutarchus	Lilac bronze	27	"	"	
Yellow Perfection	Light bronze	30	"	Large	Largest flower, one of the best among the cheaper varieties.
Apricot	Ruddy apricot	28	"	"	Often used for exhibition.
Bronze Queen	Soft buff	26	"	Medium	One of the most popular bronze varieties.
Golden Bronze	Soft buff	24	"	"	Often more than one flower on a stem.
Dom Pedro	Coffee-brown	25	"	Large	One of the most popular of the dark bronze shades.
Lucifer	Dark orange	28	Late	"	Very beautiful on a graceful stem.
Panorama	Deep orange	24	Mid	"	Globular flower.
Turenne	Purplish brown	30	"	Very large	Specially recommended for exhibition; somewhat like Louis XIV, but duller.
Godet Parfait	Blue purple	28	"	Medium	One of the most popular in this color.
Socrates	Rosy violet	28	"	"	Often having an extra number of petals.
Cardinal Manning	Rosy bronze	30	Late	Large	Stem could be better, beautiful flower.
Vertumnes	Rose purple	28	Mid	"	Becoming grayish lilac tinged purple as it ages.

DARWIN TULIPS

Name	Color	Height	Season	Size of Flower	
Isis	Dazzling crimson-scarlet	26	Mid	Good-sized	Better than Glow and Europe for the garden, bigger flower and better stem.
Farncombe Sanders	Rosy red	30	"	Huge	The best amongst the cheaper kinds, has tendency to bend a little at neck although has a good stem.
Wm. Pitt	Dark crimson	26	"	Large	Larger than Bartigon, extra forcer and bedder.
Pride of Haarlem	Rose-carmine	28	Early	"	Has the American Beauty Rose color, most popular with Clara Butt and Reverend Ewbank of all Darwins.
Baronne de la Tonnaye	Bright rose, margined blush rose	30	Late	Medium	This flower lasts longest of all Tulips, very beautiful on strong stem, flower could be a little larger, difficult forcer.
Madam Krelage	Lilac-rose, margined silvery rose	28	Mid	Good-sized	Well known, one of the oldest Darwins.
Suzon	Soft buff-rose, shading to blush at margin	28	"	" "	Fine when planted with Wisteria.
Psyche	Silvery rose	26	"	Large	Very refined color, weak stem.
Clara Butt	Clear pink, flushed salmon-rose	22	"	Medium	Very popular, and the finest pink in existence.
La Candeur	Pale tinged rose	28	"	Good-sized	Nearly white when in full bloom, black anthers.
La Tulipe Noire	Maroon-black	26	"	" "	So called Black Tulip.
Wm. Copeland	Rose-lilac	26	Early	" "	Recommended for forcing only, poor shape and color when planted outside.
Dream	Pale heliotrope	26	Mid	" "	Best amongst the cheaper kinds, for bedding only.
Reverend Ewbank	Soft lavender-violet	24	"	Medium	Lovely color, flower could be larger.
Remembrance	Pale slaty lilac	25	"	Large	Generally speaking slaty colors are not often used in gardens, look very dull.

AMONG OUR GARDEN NEIGHBORS

Readers' Open Column for Exchange of Comment and Experience

Choice Begonias of an Illinois Gardener

TO THE EDITORS:

For years I have been an enthusiastic eader of your magazine. I especially like the)pen Column and the pictures of fine gardens. I have a large collection of rare Begonias and hope these notes may help someone that oves them for their decorative qualities. The general belief seems to be that fine Begonias, particularly Rex varieties, are difficult to grow. I would very much like to get in touch with other Begonia growers who have had more han ordinary success in growing the old varieties. The following are a few of the most noteworthy Begonias in my collection:

B. Verschaffelti—A fine tall shapely grower and ery ornamental, foliage somewhat round but irregular in form, dark metallic green on upper surface, bronze-red underneath, sprays of pink flowers, arried well out on reddish foot stalks, beautiful nd easily grown.

B. Sunderbruchi—One of the most beautiful and nique kinds I grow, each leaf separated into from even to nine points, the whole a dark green with eins and midrib broadly shaded with velvety black airs, large panicles of pinkish white flowers well bove the foliage on long, strong, and hairy stems; hould be watered carefully.

B. manicata aurea—Large glossy smooth leaves a elicate shade of green beautifully blotched with ellow; flowers delicate pink in large clusters on xtra long stems.

Curly-leaved sport of Begonia Feasti—Quite a nique plant, edge of leaf having curly or crinkled ffect, beautiful blooms in sprays of delicate pink.

B. ricinifolia (Star Begonia)—A fine tropical ooking plant with large palmate leaves deep velety green above and rich red underneath; flower tems often from two to three feet above the foliage arrying sprays of delicate pink bloom.

B. Mrs. A. C. Townsend—Belongs to the ricinifolia family; large leaves of lustrous metallic green; rofuse bloomer; flowers delicate light pink in prays giving a lovely cloud-like effect.

B. speculata—One of my favorites belonging to Rex type; leaf grape-shaped and silvery with light reen veins; easy to grow into fine specimens.

B. olbia—An entirely distinct sort, large elongated oliage, light green spotted with silver; flowers in mmense clusters; the entire plant presents a deightfully soft appearance.

B. rubella—Has large foliage of light green shaded ith chocolate, under side of leaf red and green; rge sprays of pink flowers produced on long hairy tems; both leaf and stems thickly covered with eddish hairs.

B. Paul Bruant—One of the most desirable of all Begonias, easy to grow, produces large well-formed eaves and rose shaded flowers on long graceful tems.

B. compta—A very pretty and strikingly distinct sort; leaves long and irregular in shape, bright green with midrib and veins marked by heavy bands of silvery white.

B. Gilsoni—Has dark brownish green leaves with wide veins of lighter green on upper side; underside and stems are dark red; flowers green and salmon pink.

I wonder if any G. M. & H. B. reader has either of the old Begonias heracleifolia or Clementinae? I would also like to hear from someone that has grown Gilsoni, palmata spiralis, and Mrs. Kimbell—all three Rex varieties; also the old Carrieri.—MRS. JENNIE FARMER, *Salem, Illinois.*

A Deadly Procedure for Ants

TO THE EDITORS:

Some time ago one of your readers requested a means of removing the "Persistent Black Ant," and some one else suggested the use of the ant's natural enemy—the flicker. No doubt the flicker does destroy many of these garden pests but we cannot always feel sure of them. Having a few nests of ants in the garden I had a good opportunity to experiment and I have a means of removing them as follows:

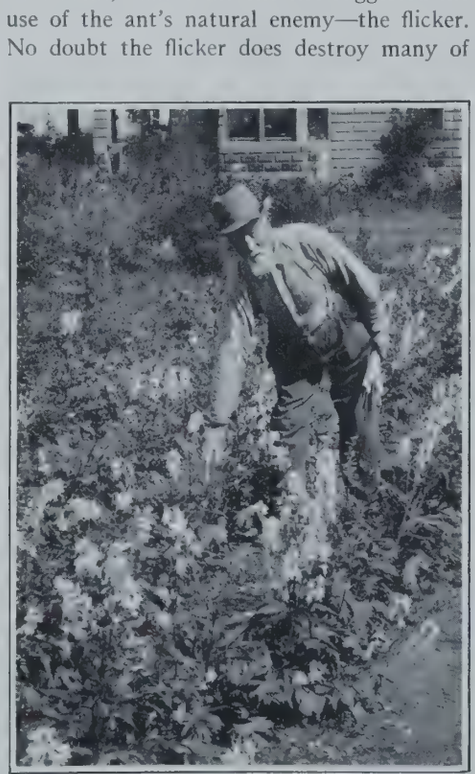
The first step is to make an opening in the center of the nest and deep down so that the bottom of the hole is three inches below the bottom of the nest. Now take a small bottle (capacity about one ounce with small opening) and place several (three or four) cubic centimeters of potassium cyanide in the bottom of the bottle and in the top insert the end of a thistle tube or glass funnel and loosely fill around the stem with soil that was removed from the hole, until the soil is flush with the surrounding level.

The next step, and the fatal one, is treating the potassium cyanide with hydrochloric or sulphuric acid. Take the stopper from the acid bottle and, being careful not to breathe any of the fumes, holding the bottle at arm's length pour about six c. c. of the acid down the funnel. Then quickly stop up the acid bottle. As soon as the acid runs down the tube the deadly gas will rise but as soon as the gas (a faint white cloud) first appears the funnel must be snatched out and a little fine dirt thrown over the hole—it must not be packed.

It is well to hold the breath from the time the acid is opened until the job is complete (this is but the work of a few seconds) on account of the deadly nature of the gas. One cannot be too cautious with this gas and if you become confused and this gas reaches the air you breathe, you should quickly leave the spot where you are working until things quiet down.

When the bottle is successfully placed leave it for a few days (two or three) and indeed it is not necessary to remove it at all!

The gas from the acid will destroy foliage, but properly handled it has little chance to damage anything.—ERVIN M. HERRICK.



MR. W. A. TOOLE WITH HIS WHITE DELPHINIUMS

At eighty-three Mr. Toole is still getting thrills out of his experimentation with these particular garden pets of his—and not only thrills, but results!

A Garden Full of White Delphiniums

TO THE EDITORS:

While at Baraboo, Wisconsin, last summer, I happened upon a most unusual sight. I believe the majority of readers grow blue Delphiniums, but it was my good fortune

to run across the largest field of white Delphinium Hybrids in my experience.

Feeling that the sight may interest others it affords me pleasure to forward you a picture of this garden, also the man "behind" the enterprise at his favorite job of marking special specimen plants. At eighty-three, W. A. Toole looks back upon nearly half a century of garden endeavors, during the last twenty years of which he has experimented with his special pets, the white Delphiniums.—MAY MITCHELL, *New York.*

Good Words from a "Garden Neighbor"

TO THE EDITORS:

Among your many enthusiastic readers, I doubt if any one more deeply appreciates the help and inspiration you give than ourselves.

We bought this place ten years ago. (See accompanying photo.) It was practically in the wild—a corner of a Pitch Pine wood lot, with Sumac, Sorrel and their ilk growing all over it. Belonging to that large class of commuters who love a country place but have a moderate income, we have done the work of developing mostly with our own hands, guided by your invaluable suggestions. Every month of the ten years your magazine has been read from cover to cover, advertisements and all.

The Contributor's Column, I should say, was best of all. But many, many splendid things are in each number. Thanks to them all, we have fruit trees of fine quality in good bearing, all sorts of small fruits, perennials from seed, enough to share with our friends, vegetables in rotation; with plantings of shrubbery trees and vines that are a delight to take care of. We do a little more each year. The greatest joy of a garden is the hope for next year. It can always be made better.—A. C. C., *Wakefield, Mass.*

WHAT ENTHUSIASM WILL DO

When "Pine Corner" was first acquired ten years ago it wore a very bleack air (lower cut) but stands to-day comfortably girdled with green things (above); and its owner, Mrs. Covell, of Wakefield, Mass., is generous enough to say that G. M. had a hand in its making (see accompanying letter)

Experience with Domestic Grown Bulbs

TO THE EDITORS:

May I be permitted to add more of my experiences with early spring bulbs, as various Pacific Coast correspondents have written me and sent catalogues, and correspondents from other places have written to enquire?

In my former communication on the subject (April, 1924) I mentioned buying some bulbs of Leucojum vernalis from a Boston seedsman who said they had come from California. My recollection is that these bulbs have not yet been released from quarantine. The bulbs were very large and the dealer said they were much larger than any foreign bulbs he had had for some time. They appeared to be healthy and first-class in every way. I planted them in a new bulb bed. Exactly 3 bulbs bloomed in the spring (out of 20) and each flower spike contained two or three flowers, instead of many more as I think is to be expected. Of course it cannot be said definitely that these bulbs will not do better next year—but in view of the doubt that all Easterners have on the subject this does not seem a point in favor of the Californian product.

To offset this experience a certain New Jersey seedsman raised some bulbs of Muscari Heavenly Blue. A Garden Neighbor sent me five bulbs—and the results were certainly marvellous. Every bulb bloomed, and my recollection is that there was more than one spike to a bulb. The flower spikes were nearly four inches tall, with the stem about eight or ten inches long, and the color was "heavenly blue"! I have other Grape Hyacinths sent by another Garden Neighbor about the same color and quite large, possibly the same variety, which came from the increase of earlier plantings, and it is possible that the unusual size of these five bulbs is due to the fact that they were "mother bulbs," and perhaps had some special cultivation. If we could get American grown bulbs such as these they would certainly be worth having whether they are raised on the Atlantic or Pacific Coast. Of course, I do not know how these particular bulbs were raised—nor whether this experience proves any important point, nor whether this nurseryman could properly be asked to explain his methods in the interest of better gardening. Possibly in view of the fact that it must be many years before the American market can furnish a sufficient number of bulbs to meet the needs of our gardens a nurseryman might be willing to reveal some of his trade secrets without fear of competition. Or perhaps both Eastern and Western growers might be persuaded to send bulbs to such places as the Botanic Gardens to be tested.

I suppose there is some distinction about growing offsets or raising bulbs from self-sown seeds, because it is certain that certain bulbs do increase *too* freely, and this increase flowers satisfactorily. I have Muscari, Scilla, and Star-of-Bethlehem which were sent me some three years ago by Garden Neighbors. A correspondent from the Middle West wrote me recently that in her part of the country Star-of-Bethlehem was regarded as nearly a pest, and that she herself had literally "thrown a bushel of surplus bulbs into the dump" and kindly offered to sell me any number at market prices. As I already was supplied with a generous gift from a kind Garden Neighbor, I did not need the bushel offered. It seems a pity to put such lovely things in a dump, when they are still excluded by that quarantine, it would seem. They might give joy and comfort to many other people—and a bushel would supply a great many gardens, or furnish what some garden-writer calls "garden wampum."

One more suggestion I have to offer, an experiment which I am only beginning myself, and so have no results to justify my suggestion. Seeds of bulbs are offered by several

Old English CHINTZES

With the interest in English chintzes the flowers of Georgian Gardens bloom again in modern *CHINTZES*

IT was in the regime of the Georges that the beauty of English fields and gardens, covering walls and draperies, filled those delightful eighteenth century interiors with a wealth of naturalistic designs. It is to this less formal decorative taste of the period that we owe the floral designs which are meeting with fresh enthusiasm today.

The favorite floral prints of those days give us designs as varied as they are charming. One of the most popular is the urn motif, repeatedly seen in modern prints, and typical of the period with its flowery patterns.

Very often modern chintzes are characterized also by the stripes or striped effects shown in many late Georgian and early Victorian prints. Today these may have floral serpentine designs in broad wavy bands varied by flowers of every description, bird forms, tiny pastoral landscapes, or plumes, which adorned so many eighteenth century English chintzes.

Profuse flower motifs with bird forms recall the English chintzes of former years

The so-called "pillar" chintzes have likewise come back, old favorites which took their name from a design of a pillar heavily entwined with flowers. Another group of prints recalls the so-called "Persian" prints—chintzes with small patterns on a dark or buff ground.

Modern chintzes reproduce, too, the beautiful soft lustre of the original ones which were often calendered. Some of these are calendered, others have the crisper texture and higher sheen that glazing gives, and still others have the new semi-glaze—that soft and lustrous finish which permits easy draping.

* *

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This semi-glazed "pillar" chintz conceals its architectural motif with naturalistic garlands

As in this calendered chintz, the urn was the theme of many delightful old Georgian chintzes

The Indo-Portuguese stripe motif of English chintzes suggests this delightful plume design

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THE CORNER OF A KENTUCKY NEIGHBOR'S GARDEN

Only a little garden of 68 x 118 ft., so its owner, Mrs. W. L. Carter, of Lexington, writes; but a very well planned and hospitable little garden since it harbors some "5000 choice bulbs, 150 choice Peonies, 300 choice Pogon and 45 Apogon Irises, all the worthwhile perennials and annuals, several fine Bush Roses, 18 varieties of Climbers, to say nothing of native wild flowers and ferns"

foreign seedsmen: Colchicum autumnale (a species of Autumn Crocus) is one that is offered by Thompson & Morgan, Ipswich, England. The Floraire Nurseries, Geneva, Switzerland, offer a number of other seeds including Scilla, Muscari, Narcissus, Crocus, Eranthis, Fritillaria in variety, Helleborus, Mertensia. At 20 cents per packet one might experiment. Some at least of these bulbs may be grown from seed. It is true that it may take some time but if they are to be excluded on quarantine after 1925 it will be difficult to secure them in this country. Such catalogues of American growers as I have seen ask prices very much in excess of the foreign dealers, and whether or not these prices are justified, they would soon become prohibitive for any garden that is supported by a moderate income.

Some correspondent of the GARDEN MAGAZINE wrote a communication that caused much needless disappointment to intending purchasers of foreign seeds, the more serious because the foreign varieties were those not obtainable in this country. As I was one of those who were thus affected it occurred to me to telephone to the office of the Federal Horticultural Board in Boston, where I received the comforting assurance that no change had been made concerning seeds of flowers, etc., which could still be admitted free as before. The regulation affects seeds of trees mostly. [See official statement as to entry by mail, G. M. Feb. 1924, page 361.—ED.]

A Pacific Coast correspondent wrote me that bulbs could be successfully grown there, and that with the 1925 importations there would be an ample supply for the American market when the quarantine went into effect once more, but it has certainly been stated frequently that it would take from thirty to fifty years to raise enough to supply the American market, so perhaps we might be wise to try seeds in our own gardens. Of course, it will not be long before our American seedsmen will supply us with such seeds if the experiment proves practical.—R. F. HOWARD.

More About Feeding Roses

TO THE EDITORS:

On looking over some back numbers of GARDEN MAGAZINE & HOME BUILDER I came across an article entitled "How I Feed My Roses" by Rev. Spencer S. Sulliger. I had not noticed this article before or you would have heard from me sooner.

The treatment which the Rev. Sulliger's Roses received undoubtedly produced good blooms and bright foliage, but there are one or two things about his treatment which I think could be improved upon with profit, and some others for which there is no scientific reason.

1st. Potassium nitrate is far preferable to sodium nitrate as a fertilizer. In fact the sodium salt if used continuously will act as a poison to the plant instead of helping it.

2nd. Bonemeal is only very slowly assimilated by the plant and hence is better added to the soil in the fall than in the spring. If added in the fall its greatest effectiveness will be felt the following spring and early summer. When added in the spring it will be most effective in the late summer and fall. Bonemeal is a well-balanced plant food.

3rd. So far as is known there is no apparent reason for feeding a plant different ingredients of a diet at different times rather than feeding the mixed diet at each meal, except, as already mentioned, the case of slowly absorbed or quickly absorbed food. Soluble potash, nitrogen, and phosphate had better be given together in the summer for quick effect, and the solid, less soluble mixture be given in the fall. When adding the former the ground should not be very moist or the solution will run off the surface to a place where not wanted instead of penetrating the soil at the spot where administered.

4th. The only scientific way to study the effect of any given fertilizer is to run blank comparison tests at the same time in the same kind of soil, and under the same kind of treatment otherwise. Changing the treatment from one summer to another means nothing.—E. P. WIGHTMAN, PH. D., *Rochester, N. Y.*

Rocky Mountain Pentstemons which Flourish in Utah

TO THE EDITORS:

Has any one ever grown any of the Rocky Mountain Pentstemons? If so, they evidently were not a success, as the only place I can find them mentioned is in Bailey's "Cy-

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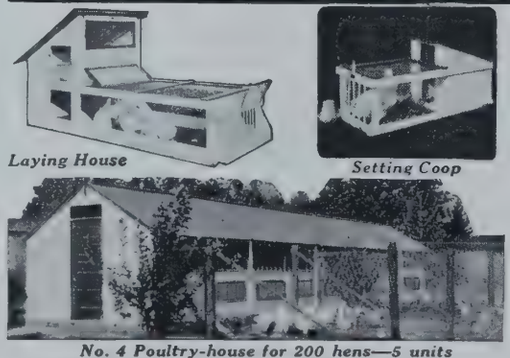

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clopedia" and the Botanies of Gray and Coulter.

So far I have only grown three species, namely, P. cyananthus, P. humilis, both described by Gray and by Coulter; and P. utahensis which I cannot find described in any Botany, but which my good friend, Marcus E. Jones, has identified for me and which is included in his new Botany of the Rocky Mountain Flora soon to be published.

P. cyananthus is the best and also the easiest to discover of the three I have tried. It is usually found growing in full sun on north slopes in rather rocky ground among the Oak brush, but the finest specimens flourish where the ground is shaded from the direct rays of the sun. It grows about 2 feet high in its wild state and has clear blue flowers in late May and early June, lasting in bloom for about three weeks. The leaves are cordate ovate and are slightly glaucous. P. utahensis is about the same height but much darker in color. The best specimens I have found growing wild were in fairly moist well-drained meadows where they grow much taller, occasionally reaching 4 feet in height. The leaves are dark green, lanceolate. P. humilis is a prostrate plant, seldom growing more than 6 inches high by 18 inches broad. The flowers are the same color and leaves the same shape as those of P. utahensis.

Under cultivation P. cyananthus and P. utahensis have improved tremendously; I have them in the border where both grow about 4 feet tall, the flower spikes 7 to 10 inches long. Last year they were a sight to behold on Decoration Day with P. cyananthus behind the yellow Tulip Gesneriana lutea growing through Myosotis Royal Blue and Myosotis Sutton's Pink Gem.

I have a small place of seven acres with two clear streams running through it and these Pentstemons take care of themselves well up on the banks of these streams, with no attention at all. I have seen them continue to thrive through a drought of six weeks and bloom beautifully the following spring.

P. humilis is a true perennial; about the other two I cannot be sure, as I have grown them only or three years and occasionally a plant or two disappears. They all set seed plentifully, but it is slow to germinate and seldom comes up until the following spring.—H. B. LAMB, *Oakwood, East Mill Creek, Salt Lake City, Utah.*

Garden Flowers Which Are Wild In Central Texas

TO THE EDITORS:

Many of the popularly cultivated annuals and herbaceous perennials had their original home in Texas. The plants that I now refer to, with the exception of Phlox, are from central west Texas, which is an empire in extent, each section having a different flora. During April and May the prairies and woods are starred by a greater variety of flowers than I have ever seen in the East. Annual Phlox Drummondi is a native of some portions, as also is the lavender Phlox pilosa. Under cultivation this shows shades of mauve, dark red, pink, blue, and white.

The Mexican Prickly Poppy (Argemone) covers the fields with great flat crinkly silk petals of white, with centers of yellow stamens. This occasionally varies in flower to lavender. The foliage is spiney on the order of Holly, only of a bluish-gray tint. Interspersed among these are a great many species of compositae—Daisies of various sizes, mainly in white and shades of yellow; several varieties of Coreopsis, showing absolutely no difference from the usual cultivated types, except in variety of colors.

Evening Primroses open in banks of soft primrose yellow, white or pink, with four petaled flowers three inches across, which hide the plants in profusion of bloom.

There are also great fields of single Gaillardias, red centers, with golden petal tips. This makes a brilliant show, and while it varies greatly in the wild state, under one year's cultivation it varies much more into a number of distinct varieties, some having merely gold petal tips, others being nearly all yellow, the red varying from brownish to scarlet to purplish, and in size from one to three inches in diameter.

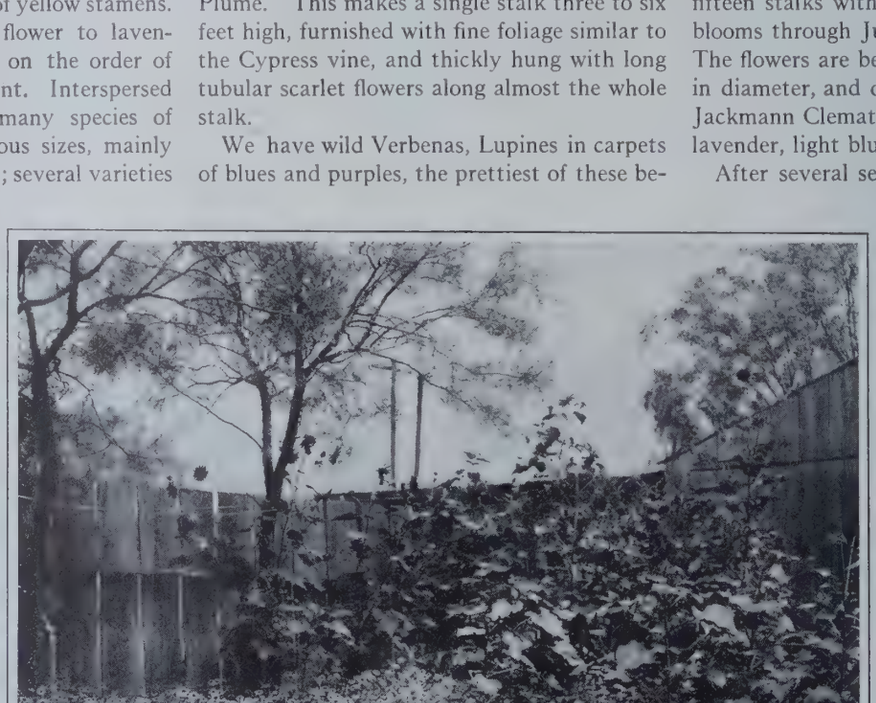
On rough ground grows a perennial popularly known as Foxglove, which I believe is properly Pentstemon Cobaea. It blooms in spikes two feet high with large tubular flowers, larger in size than the English Foxglove, and varying through amethyst color to white and dark lavender. A smaller flowered species has bright rosy lavender flowers.

Then there is the blood red Callirhoe involucrata, with flower and foliage resembling a small trailing Hollyhock; also a white Delphinium, with spikes from one to two feet. In biennials comes Gilia rubra, or Texas Plume. This makes a single stalk three to six feet high, furnished with fine foliage similar to the Cypress vine, and thickly hung with long tubular scarlet flowers along almost the whole stalk.

We have wild Verbenas, Lupines in carpets of blues and purples, the prettiest of these being the Blue-bonnet, the state flower of Texas. This blooms in great colonies massed so thickly nothing grows between. The spikes open gray-blue at the top, gradually changing until at the bottom they are dark blue. We have Yucca in tall spikes filled with clustered white bells, Cacti, Sunflowers, Thimble-flowers, azure Salvia, and later Goldenrod, Aster, Eryngium, Liatris, etc., but the great majority of Texas flowers are spring bloomers.

In my opinion the most beautiful wild flower native to this section is the gentianaceous Eustoma (or Lisianthus) Russellianum, a species native to damp-soiled gravelly creek bottoms. This flowers on stalks three feet high, an old plant sometimes having twelve or fifteen stalks with the tops constantly full of blooms through June, July, and early August. The flowers are bell shaped, about two inches in diameter, and of the dark purplish blue of Jackmann Clematis, varying occasionally into lavender, light blue and white.

After several seasons' experiments I finally grew this from its fine powdery seeds and have succeeded in blooming it in pots. It flowers the second year from seed. I have never seen seed of this listed in catalogues, and as the blooming period is longer than most perennials, and that in the heat of summer, it occurs to me it should be developed, as even undeveloped the flower is finer than the larger part of the cultivated perennials, and stands freezing down to ten above zero in its native climate. A natural tendency to vary is noticeable, which should make it susceptible to much improvement.—DR. C. N. RAY, *Abilene, Texas.*



WHERE WILD FLOWERS HAVE MADE THEMSELVES AT HOME

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A Special Southern Planting Week, November 2nd–8th

BECAUSE the date of National Garden Week in April comes somewhat late for actual planting in many sections of the South, an Auxiliary Garden Week was proclaimed last year. This was held during the first week of November with such success that it has been decided by the National Garden Association to make this week an annual garden event. The date for this year is November 2nd to 8th. Newspapers, State Agricultural Colleges, Garden Clubs, Horticultural Societies, and Florists' Associations are working in most of the states to make this week of planting a marked success.

There has been an awakening all over the South to the value of their natural beauties and in no section of this country has there been greater coöperation between Boards of Trade, Chambers of Commerce, Men's and Women's Clubs, Roadway Commissioners and private home owners.

FLORIDA'S FAR-REACHING PROGRAM

IN THIS whole-hearted interest, the state of Florida has led from the first, its program still far in the lead of anything that is being accomplished elsewhere. The people of this state have not only formed a State Beautification Commission (as told in our June issue), but that Commission now publishes an illustrated monthly booklet, *Beautiful Florida*, in the interests of this work. This tells of every activity in the state that is aiding in this work.

What is being accomplished there seems incredible until one realizes that this Beautification Plan is not sponsored by just a few groups or clubs, but that it has the concerted effort of every individual in the state behind it. It is one of the most intensive, systematic, result-producing campaigns of this kind that has come to the attention of the Association.

The following from *Beautiful Florida* shows in part what is being done there: "Eighteen counties have now legislated against signs on the highways and as many more will probably take similar action in the next two months. Thousands of signs are disappearing from the roadways of Florida. Disappearance of the signs has been followed in many cases by plantings of flowers and shrubs. There are some twenty nurseries throughout the state where Beautification Commissions are propagating their own plants for this work. Thousands of Palms and Oaks are being set out and hundreds of thousands of vines, shrubs, and flowers are being planted in parks and along the roadways. The idea of saving the fine old trees and other natural beauty of the state is growing."

WHAT CONSERVATION MEANS TO GARDENS

THE National Garden Association is particularly interested in one phase of this work, quite apart from the fact that it makes for greater beauty. It is something that every state in the Union must soon make a state-wide issue, and that is the saving of the trees and the planting of new ones. To quote still further from this booklet: "Giant Cypresses, Long-leaf Pines, mammoth Live Oaks, Magnolia, and hundreds of other lovely trees are making their last stand in Florida. There is no finer beautification work than saving this priceless heritage." And this work is being pushed earnestly in this state. This conservation brings up another necessary endeavor—the saving of our birds. Where there are no trees, there will be no birds; and where there are no birds, man will find it difficult and almost impossible to garden. In Florida, the saving of these trees in parks make for bird sanctuaries. In this state alone there are eleven federal, and forty-two county, municipal, and state bird sanctuaries plus one entire county that has been created a sanctuary by act of legislature, the first county on record to be so declared.

Does not this suggest lines of endeavor for every other locality, every other state? The work being accomplished here is along such practical lines that it stands as an example to every other community. It is the actual development of the vision back of National Garden Week!

FEDERATED STRENGTH OF SOUTHERN GARDENERS

EVERYWHERE throughout the South garden activities are spreading with amazing rapidity. Virginia has its notable and effective Federation of Garden Clubs with their broad vision. To preserve the historic gardens of Virginia, to keep alive its wealth of natural beauties is work that is of interest to each one of us. Kentucky is doing the same through the many Garden Clubs in the state. These are not federated, but the work done by them is far-reaching and of civic value. In both of these states and Maryland, garden programs are being so conducted as to speed the love of gardening and civic beauty far and wide.

North Carolina is rapidly coming to the fore with the formation of Garden Clubs. At Reidsville, the Club is only a year old, but in this short time it has supported the Anti-Billboard and Conservation movements, made two community playgrounds, held a clean-up campaign, besides helping to organize other Garden Clubs throughout the state.

In Louisiana, the Horticultural Society and the Garden Club of New Orleans strive unceasingly for beauty. In Texas, Mississippi, and Georgia, the Garden Club movement with its fullest, broadest meaning is spreading; while Tennessee is running Florida a close second in the state-wide activities of its many Garden Clubs. Beautification in these states is held to mean more than just lovely gardens. The workers have visioned the broader meaning of the word and to them it spells conservation of the natural beauty of their states, development of the waste places into spots of beauty, lovelier cities, better roads and highway planting.

JUNIOR GARDEN BRIGADES

THE National Garden Association hopes to see not only a Federation of Garden Clubs in each state, but to see these state organizations banded together in a Southern Federation that will work to develop the beauty of the South.

One important activity has been started in many of the Southern states—the forming of Junior Garden Brigades. In Mississippi, the State College has sent out a most valuable pamphlet (free to every one in the state) telling of the work done by school children in forming "Garden Cities." At Orlando, Florida, Junior Home-Garden Brigades were started and have been so successful that the idea has been adopted by the Garden Club of Jacksonville. It is a safe prophecy that it will spread to every city in the state. West Virginia has established a Junior camp at Jackson's Mill for the development of the boys and girls in outdoor activities.

The National Garden Association will be glad to send on request copies of Constitution, By-Laws, and Programs for Garden Clubs. Please address all communications to the Association at Garden City, N. Y.—ELLEN D. WANGNER, *Secretary*

National Garden Week for 1925 to be observed April 19th to 25th.

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HODGSON Portable Houses are practical, economical and attractive. The walls and roofs are made of red cedar, the most durable wood known. The framework of sturdy Oregon pine.

Hodgson Houses are built in sections which bolt securely together. The smaller houses can be erected in a few hours with unskilled labor.

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ROSES

AUTUMN PLANTING

"The Rose Lovers' Opportunity"

IS THE title of our beautifully illustrated new booklet describing a collection of roses that can be planted successfully in the Autumn, with a special price for the collection. Many of the illustrations are in color. As we now know and understand Hybrid Tea and other kinds of Roses, we realize more than ever the importance of planting them in the Autumn. Among the special offers in "The Rose Lovers' Opportunity," is the following collection of 12 Roses for $9.00:

Betty
Chateau de Clos Vougeot
Columbia
Duchess of Wellington
Killarney Queen
Lady Alice Stanley
Laurent Carle
Mme. Butterfly
Mme. Jules Bouche
Mrs. Aaron Ward
Mrs. Wakefield Christie-Miller
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Peonies, Irises and Delphiniums

A complete catalog of Hardy Perennials, Peonies and Irises, and Old Fashioned Flowers, and Rock Garden Plants, beautifully illustrated in color and black. It contains an alphabetical table of Hardy Herbaceous Plants, indicating flowering period, approximate height and color.

In your request for catalog, it is important to state definitely the kind of plants you intend to plant.

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Nurserymen and Florists

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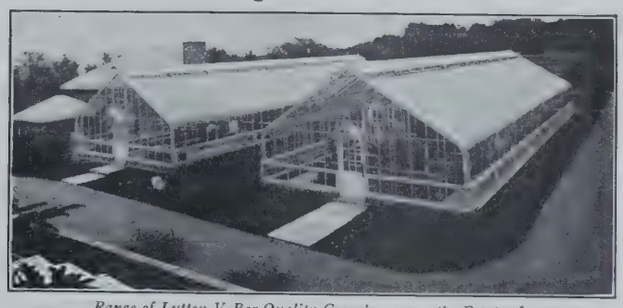
PROTECTION FENCE

LUTTON V-BAR QUALITY GREENHOUSES



Range of Lutton V-Bar Quality Greenhouses on the Estate of Mr. Moses W. Taylor, "Glen Farm," Newport, R. I.

Built Absolutely Right in the First Place

MR. TAYLOR was so well pleased with the range of Greenhouses shown above, that he has given us an order to build another on his Estate at Mount Kisco, N. Y. He said that he did not care about any specification but simply wanted us to duplicate the construction used in the Newport Greenhouses.

The owner of a Lutton Patented V-Bar Greenhouse is assured that his greenhouse will last indefinitely—that the cost of maintenance will be practically nothing.

No trouble—no repairs—no worry

No matter what size or style of greenhouse is desired you will find a "Lutton Built" greenhouse the most satisfactory in every way.

The scientific, efficient heating system insures even temperature on coldest nights. The ventilation is perfect. One of the exclusive features of Lutton greenhouses is its indestructible sanitary type of plant benches, with galvanized iron frames, porous tile bottoms and slate retaining sides.

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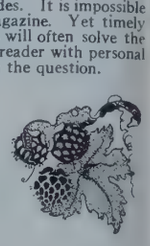
GARDENING FOR THE BEGINNER

THE MONTH'S REMINDER—NOVEMBER

As to Time and Place: In gardening practice a date can only be approximated as seasons vary and local conditions will have some influence. Generally the latitude of forty degrees at sea level and a normal season is taken as standard. Roughly, the season advances or recedes fifteen miles a day, thus Albany would be about ten days later than New York (which is latitude 40). The latitude of Philadelphia is a week earlier. Also allow four days for each degree of latitude, for each five degrees of longitude, and for each four hundred feet of altitude. Latitude forty passes through Philadelphia, Pa.; Columbus, Ohio; Richmond, Indiana, Quincy, Ill.; Denver, Col.

How to Use This Guide: Suggestions as to the most important things of the month are given in this department so as to "remind" the gardener of the current duties. For routine details of such things reference should be made to standard handbooks and guides. It is impossible to make a complete manual of practice in each number of a periodical magazine. Yet timely articles will be found elsewhere in each issue, and references to back numbers will often solve the immediate question. Moreover, the editorial staff stands ready to help any reader with personal advice by mail. A self-addressed stamped envelope should be enclosed with the question.

Who Writes This: The advice and instruction in this department are the gleanings of many years experience in practical gardening matters by competent amateurs and others who have "been through the mill." The contributions are made from various sections of the country: for example, Mr. Jesse A. Currey contributes from Oregon; Mr. Theiss from Pennsylvania; Mr. Henry Gibson from Pennsylvania (formerly from New York); Mr. Sherman Duffy from Illinois; Mr. A. Kruhm from an extensive Eastern acquaintance; and, in addition, occasional notes from elsewhere and by the editorial staff and associated contributors of experience.



PROPER covering of the garden is one of the great secrets of success. Don't do it too early, don't do it too heavily, and don't do it until the ground is frozen.

Winter covering for the most part is for the purpose of keeping plants cold, not to make them warm. The purpose is to keep them safely frozen, once a freeze sets in, until the permanent thaw of springtime. Many plants, hardy as to low temperatures, succumb to the thawing and freezing. Plants which keep their foliage the year round are often injured by the bright sun of winter thaws followed by cutting winds and freezes. Covering would be unnecessary were we sure of a continuous blanket of snow.

Cover; don't smother! Covering which will permit air circulation is essential. Pine needles, if available, and evergreen branches are ideal covering. Hardwood autumn leaves such as Oak are excellent. If not available, use coarse straw or salt hay. Cover lightly, just enough to conceal without burying, Primroses, Hardy Candytuft, Arabis, Creeping Phlox, Aubretias, Hardy Alyssum, Violas, Pansies, and early spring-blooming plants in general. Remove the covering with the first warm days and they will be ready to burst into bloom. The plants will survive without a covering, but the foliage will be badly disfigured and they may kill back. Cover hardy Chrysanthemums lightly but completely. They are often killed by too heavy a cover.

Plants with thick tufts of foliage suffer from winter thawing and freezing; in fact, Foxgloves and Canterbury Bells, while hardy as to cold, must be kept fairly dry. A roll of tar paper is an excellent and convenient cover for plants of this kind, easy to handle and easy to clean up in spring. Spread it over the plants, holding it down with bricks or stones, but be sure to place it so that it will permit air to circulate under it. Wallflowers may be brought through mild winters in this manner very frequently. Snapdragons may be made perennials by the same means and give fine early bloom.

Some of the Irises such as Caterina, which winter wet kills, may be carried along under a tar paper covering or under a coldframe sash. The tar paper is easier to handle.

Bulb beds of heavy soil need a mulch to keep the frost in, otherwise many of the bulbs are likely to be found on top of the ground in the spring, ruined, thrown out by thawing and freezing. Fall-planted perennials suffer from the same cause and need a light mulch.

Hill up Hybrid-tea Roses with earth for six inches and then pile on leaves, straw, or other mulch until the tops are covered. Climbing Roses in the Middle West are of dubious hardiness unless laid down and covered with mulch. Large plants cannot be handled readily so it is best to wrap the lower stems to a height of five feet with tar paper, hilling up with earth for a foot or more. By this means at least some blooming wood will be retained.

INCREASING THE BLACKBERRY PLANTS

CUT out the old stems of the Blackberries, if not already cut away, and mulch the roots of the plants. A good covering of manure will be helpful even to those varieties so hardy as to need no protection. The tender sorts should be laid down and covered for the winter.

Now is a good time, too, to dig up Blackberry roots for propagating purposes. Beginning at the crown of the plant, dig carefully outward, dissecting out the roots from the earth. Take cuttings from good thrifty roots. These cuttings should be perhaps five inches long. Pack them in bundles, the same as any other cuttings, and keep in moist moss or sawdust or sand in a cool cellar. In spring plant horizontally or nearly so, under about two inches of earth. They will shoot up tops and also grow under ground, making new plants.

It often happens that, in a planting of Blackberries, one or two vines prove immensely superior to the others. By propagating with root cuttings, the gardener can easily grow more plants exactly like the superior ones and shortly replace the poorer.

STORING CELERY FOR WINTER USE

THERE are many ways of storing Celery for winter. One of the simplest is to tie the plants in bundles of six, and pack these tightly together on the moist floor of a cool cellar, where it is dark. Earth can be heaped about the roots and moistened with water. The blanching process will proceed without interruption. Or the bundles can be packed without earth about the roots, and one or two bundles at a time set in a tub containing an inch or so of water in the bottom. Thus the plants can be blanched a few at a time as needed.

November in the California Garden

HARDY evergreen shrubs and trees should be set out or transplanted in November. Plant Camellias, Magnolias, Laurels, Rhododendrons, and Pittosporums as well as the native Pines and Cypress, in order to insure root growth before spring. For transplanting, select mild weather with a moist atmosphere; and the soil should be moist, not too wet and soft enough to work in among the roots.

Take up Dahlias, Cannas, Gladiolus and Tuberous Begonias and store in a cool dry place until spring. Continue to plant bulbs and Sweet-peas, and to transplant the hardy perennials and biennials sown in late summer. Take up and replant Phlox, Doronicum, Lobelia cardinalis, Delphinium, Primroses, Cowslips and Montbretias if too crowded.

Start now, bulbs of Narcissus and Chinese-lilies in water, for growing indoors. Keep the Narcissus in a dark place until roots form, then place in the light. Anchor bulbs grown in water with small stones. Plant Lily-of-the-valley in a sheltered place and partial shade, and keep the bed always moist. Set out clumps rather than single crowns or pips.

New lawns may be started after the first rains and old lawns must be cut, rolled and raked. Sow brown spots with lawn seed covered lightly with old manure. If spots are bare, remove the top soil and replace with new turf.

GARDEN MAGAZINE
& HOME BUILDER

Vol. XL, No. 4 DECEMBER, 1924

Depue, Morgan & Co., Inc., Photo.

A VINE EMBOWERED HOME IN SEATTLE

"The members of the Lake Washington Garden Club all agree that the garden of one of their own members, Mrs. C. M. Curtis of Hunt's Point, near Seattle, is (in early spring) an enchanted spot, where the enthusiastic gardener seems to work in perfect harmony with nature. In the photograph you cannot see the lovely wooded road which leads from the highway to the house or the exquisite color effect produced by the mingling of the purple and the white Wisterias with Clematis montana on pergolas and porches nor the lovely effects produced by the profusion of gay spring flowers in the borders, and by the paths that lead to the shores of Lake Washington. It is an enchanting garden quite worthy, we think, to be pictured in our favorite GARDEN MAGAZINE & HOME BUILDER"

Courtesy Tacoma Chamber of Commerce

"I never travel very far
Beyond the pool where willows are:
There is a shy and native grace
That hovers all about the place"
Grace Hazard Conkling

A PEACEFUL WATER GARDEN IN TACOMA

Water garden feature at "Thornewood," the home of Mr. and Mrs. Chester Thorne, one of the lovely places in the Lakes residence district, Tacoma, Wash. Here in this generous climate, where the Rose has made itself a second home, other garden favorites find equally congenial conditions, and quite quickly achieve that luxuriousness of growth which gives the air of age and repose characteristic of gardens in the older parts of the world

Arthur M. Prentiss, Photo.

"So quiet it is, so cool and still,
In the green retreat of the shady hill!"
Julia C. R. Dorr

A SUCCESSFUL ROCKERY GARDEN AT PORTLAND

Dozens of old-fashioned flowers bordering the steps delight the eye in this ingenious development of a hillside garden at the home of Miss Emma H. Morton, Portland, Oregon. The house set on the steep hillside calls for individual treatment in the approach—no two sites are alike. Harmony with the existing conditions always strikes a true note. Here the native stone has been used in the construction of a rock garden approach, and even the steps are rough stone

NEWS AND COMMENT

DAHLIAS BY AIRPLANE

"TELEGRAPH delivery" of cut flowers is a pretty euphonism for a very real convenience that the retail florists have developed into a well managed organization by which an order given to your local florist is transmitted by telegraph and the flowers are delivered with appropriate cards and messages through a corresponding agent in a distant city. Something more real was accomplished in the actual delivery of Dahlias by airplane mail to the recent New York show of the American Dahlia Society. The blooms were picked in San Francisco by Mr. Curtis Redfern on Tuesday and on Wednesday the New York populace was gazing on them. They were in the air thirty-two hours and were transferred in the course of a journey to fourteen different airplanes. The fact that these blooms stood the journey and were in respectable condition on arrival, that they remained on view two days in New York and then two days at the Short Hills, New Jersey show, speaks volumes for the all around utility of the Dahlia. Air shipment by mail, however, is hardly to become an everyday practice, since the cost of transferring these three blooms was close upon twenty dollars. It still remains more practical to "say it with flowers" through the telegraph delivery.

NUT TREES

NUT trees are not only to be regarded as nut producers. Many of them are indeed among the most handsome specimens for lawn and garden ornament. They are generally long lived, and they do not make exacting demands on the culturist. They respond to good cultivation, however, but the most important after all is the selection and the planting of best improved varieties. It costs just as much to grow a poor nut-bearing tree and it occupies just as much space in the ground; both may be equally beautiful, but a selected improved variety is also much more useful too. We have nut specialists who should be consulted before planting is undertaken.

BERTRAND H. FARR

WHEN we give thought to the present ordered state of affairs among the Irises and among the Peonies, it seems hardly credible that thirty years ago everything was a complete jumble as regards these two dominant groups in the hardy garden. The clarifying of the variety lists and the systematizing of our knowledge which has been of very material benefit to the American garden is largely the work of Mr. Farr with whose memory these two flowers must ever be associated. He was the first to publish special variety lists of Iris. He was also the first to have the courage of his convictions a few years later in discarding indifferent varieties, actually destroying the stocks in his possession. Similarly, he championed the Peony, and largely made for it the place it has in our regard today.

It is worthy of reflection that this gentleman, drifting into horticulture, as we may say, comparatively late in life or at all events after he had thoroughly established himself in an entirely different field of expression, should have quickly dominated and led in the fields of his chosen fancy.

It has often been observed that the greatest epochs of progress are marked by the works of the amateur. Even though such a one eventually becomes a trader or dealer, he remains in spirit a true amateur and it is to all such that the garden looks for its greatest contributions.

HORTICULTURAL QUARANTINE

THE restrictions of horticultural quarantine are being felt in industries other than those of the ornamental plant grower and collector and, while there can be no opposition to a principle of direct quarantines against specific diseases and insects, it surely would seem that some reasonable method of administration might be devised that would not completely strangle the collector's efforts. As has been frequently pointed out, the Federal Horticultural Board makes a ruling and decides on all arguments that may be brought against it.

It has been suggested that an amendment be made to the Act of 1912 that would provide for a review board of five members who shall pass on the justice of any proposed embargo, with the hope that the plaintiff appearing before such a court would have a hearing on appeal that is the constitutional right of even the most determined criminals before being sentenced.

CLEVELAND FLOWER SHOW

WHEN the National Flower Show committee left Cleveland after the spring show this year it left behind in the minds of the citizens of Cleveland and district a realization of the possibilities of the district in the way of horticultural displays. This is exactly what the National Flower show committee set out to do.

Similar efforts have borne fruit elsewhere, most notably in New York, and now Cleveland announces a great annual spring flower show under local management to carry on the good work thus started. The dates for 192 are March 28th to April 4th. The Cleveland Flower Show under the efficient organization through which it has been established seems likely to take its place in the front rank of annual spring flower shows.

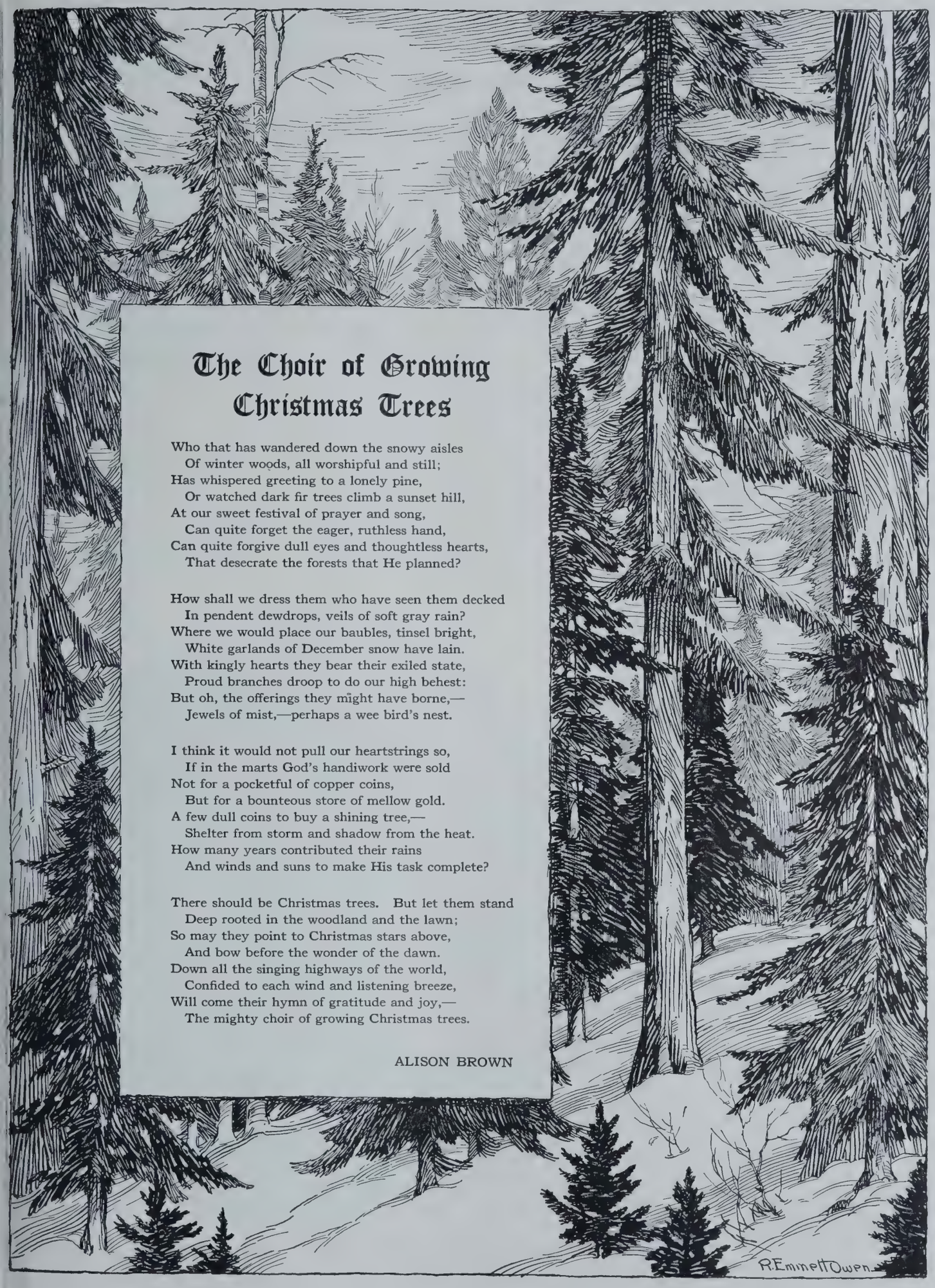
GOOD USE FOR THE OLD CHRISTMAS TREE

WHEN Christmas is over, what are you going to do with your Christmas tree? Though the needles are falling, you will be surprised to find how long it will remain in good condition when out of doors. It may be placed outside where it may be viewed from a window and with suet and crusts of bread tied to its branches, birds will frequent it in great numbers. The tree may be used as a screen in front of the refuse can or ash heap, which perhaps you do not have a view of, but your neighbor does. Or you may place the tree in a corner or on a boundary line among the shrubbery, and from its use you may gain your first impression of how very attractive a living evergreen there would be. If the tree must be discarded, there is a bed of Violets, Pansies, Foxglove or other semi-hardy perennial or shrub which would be grateful for the added protection of its branches.

OPEN CONFESSIONS

OCCASIONALLY, despite much vigilance, errors of statement somehow pass by the eyes of all concerned, and we must apologize for what after all is an obvious error in the article "How I Plant My Roses" in the October issue of GARDEN MAGAZINE & HOME BUILDER. In presenting the fertilizer formula, page 129, column 1, reference is made to "eight inches of sheep guano"; obviously it should read "eight ounces."

Another accidental mis-statement occurred in the center of the middle column on page 45 of the September issue. Doctor Morris in speaking of the million dollars' worth of nuts imported said that was the value per year instead of per week, which was a considerable under-statement. This only adds further emphasis to the great desirability of planting more nut trees with a very serious thought of the contribution to the available food crops of the country.



The Choir of Growing Christmas Trees

Who that has wandered down the snowy aisles
Of winter woods, all worshipful and still;
Has whispered greeting to a lonely pine,
Or watched dark fir trees climb a sunset hill,
At our sweet festival of prayer and song,
Can quite forget the eager, ruthless hand,
Can quite forgive dull eyes and thoughtless hearts,
That desecrate the forests that He planned?

How shall we dress them who have seen them decked
In pendent dewdrops, veils of soft gray rain?
Where we would place our baubles, tinsel bright,
White garlands of December snow have lain.
With kingly hearts they bear their exiled state,
Proud branches droop to do our high behest:
But oh, the offerings they might have borne,—
Jewels of mist,—perhaps a wee bird's nest.

I think it would not pull our heartstrings so,
If in the marts God's handiwork were sold
Not for a pocketful of copper coins,
But for a bounteous store of mellow gold.
A few dull coins to buy a shining tree,—
Shelter from storm and shadow from the heat.
How many years contributed their rains
And winds and suns to make His task complete?

There should be Christmas trees. But let them stand
Deep rooted in the woodland and the lawn;
So may they point to Christmas stars above,
And bow before the wonder of the dawn.
Down all the singing highways of the world,
Confided to each wind and listening breeze,
Will come their hymn of gratitude and joy,—
The mighty choir of growing Christmas trees.

ALISON BROWN

LET'S GROW OUR HOLLY

I—How the European Holly Came to Portland

FRANCES S. TWINING

JUST as in the seventeenth century there came across the ocean from England building materials, flower seeds, and trees to help make the new home into a likeness of the old; so, two centuries later, across the same ocean and on around the Horn, up the Pacific and through the Columbia, then up the Willamette to Portland, there voyaged, also from England, home-makers, home-making goods, fruit trees, and our gay, loved English Holly.

To my mind there is always a romantic charm associated with the Holly trees which grow so luxuriantly in almost every garden in and around Oregon's City of Homes. Even possession in our own garden does not prevent my still being a bit surprised to find them there, and I confess that my appreciation of the variegated Hollies, their glossy, spiny-pointed leaves margined in silver white or golden yellow, is doubtless due in part to the memory of my first sight of such a tree, growing near the Ivy-covered ruins of Kenilworth Castle in Warwickshire. Something of the romance of those old days lives again, for me, in every one I see, though it grow in the humblest corner.

And so it happened that the progenitors of the very trees that grow to-day in gardens in this fertile valley in what was early known as the Oregon Country, were one with those that lived in the days of the Druids.

It was English occupation, first through the Hudson Bay Company and the discovery of the Columbia River by a British captain which located side by side the pioneer who came across the plains in a "covered wagon" and the English family who came in a sailing vessel "round the Horn." Each brought with him from his own land his household goods and his garden traditions, sharing with his neighbors in neighborly fashion. Small wonder that the Englishman's Holly, thriving so vigorously in this new country, spread from yard to garden as the town grew! The demand became so great that later on large shipments of Holly were brought in from England, France, and Holland, and the stock now offered by local nurserymen is from that which came in then.

The most popular forms grown to-day are the type species Ilex aquifolium, the common red-berried Holly of British hedges; the variety pyramidalis also called Dutch Holly; and the variegated varieties listed as argenta regina and aquifolium aurea regina, silver or gold margined or splotched and bearing berries or not according to the individual tree. The commonly designated English Holly has glossy, deeply dentate leaves and a profusion of berries. The Dutch Holly has leaves usually crenate, sometimes partially dentate and bears berries in larger clusters. In comparison with the Holly native on the Atlantic Coast the leaves of all these varieties are much more glossy, more spiny-pointed, and the berries borne in clusters where the former has them singly or in groups of two or three. Often the variegated trees will show a leaf or branch of solid silver-white or the color of rich Jersey cream. They are very attractive and decorative even without the contrasting scarlet berries.

As regards berry-bearing, Holly trees have their own idiosyncrasies. Often a tree, from true berry-bearing stock and of proper sex, will show no berries until it is shocked. This is accomplished by transplanting the tree and consequent pruning of the roots or more simply through cutting off root ends by thrusting a sharp spade perpendicularly down about the sides of the root ball of the tree.

Holly hedges twelve feet and more in height are not uncommon and many country place use these tall hedges or groups of big Hollie as background for blossoming shrubs. On finds Hollies planted about the town house either singly, in groups, or planted with flowe ing, evergreen shrubs and small ornamenta trees. In the older parts of town a Holl tree flanks each side of the walk up to the doo and they dot the gardens in the rear, growin happily beside Rose hedges and almost every where. Holly trees and homes and Christma time and Roses, all thriving together!

These Hollies, if one knows how, are easil grown from cuttings. The seeds take tw years to germinate and one finds them comin up under shrubs where the mulching aroun the roots is undisturbed. I have found ther in groups of three and six under a big laur bush where the birds carry them from a Holl a hundred feet distant. These disgorge seeds, planted by the birds, seem to germinat more quickly than those I plant myself.

Harriet Park Cramer, Photo.

ENGLISH HOLLY THOROUGHLY AT HOME IN PORTLAND

This tree of the pyramidal or Dutch Holly has stood in Mrs. Jacob Kamm's garden for over 50 years. Three times it has been cut back

4VE AND SOW THE CHRISTMAS HOLLY BERRIES

American Holly plants 2, 3, and 4 years old, grown from seeds sown in January

There are many Holly farms adjacent to ortland and scattered throughout the valley here there is abundant opportunity to raise fficient Holly to supply the nation. A well ained soil and lots of water are the only re-uirements for success. Many Portlanders llow the custom of selling their surplus Holly holiday time. A florist will come and trim ur trees properly and pay you for the cut-ngs. An electrician of my acquaintance has ld Holly from an especially fine tree at a llar a pound to be shipped to the New York arket. This is unusual, the ordinary price ing about twenty-five cents, varying with e quality and demand. It is the climate of ortland rather than any difference in soil nich makes Holly culture practical. Oregon ist and Scotch mist are one and the same d conditions here are much like the Mid-nds of Scotland and those of northern ngland.

Occasionally one sees a yellow-berried Holly, metimes an American Holly from the At-ntic States. There is no true Holly native this Coast though there are attractive wild rubs with Holly-like leaves and berries. ound holiday time the stalls in the Public arket are heaped with a wonderful variety greens including Oregon Grape, Salal, istletoe, Yew, Cedar, Redwood, etc. And ere are piles of Holly branches and tiers on tiers of Holly wreathes. The latter are shioned with the berries bunched so as to ake big splashes of red both in the green and riegated varieties; they are veritable picture-eaths.

And, after all, there is nothing like Holly bear and to hold within itself the very spirit Christmas cheer.

"Oh, glad be every heart the while,
That Christmas joy is shed,
When stored-up sunshine seems to smile
From Holly's beads of red."

II—Native Christmas Greens of the East

ELIZABETH G. BRITTON

Honorary Curator, New York Botanical Garden

SINCE the publication in last December's GARDEN MAGAZINE & HOME BUILDER of the appeal to help save the Holly and other Christmas greens, many interesting letters and photographs have been received.

Holly trees are being grown with success in many places. We have learned that at Mount Vernon there are some fine Holly trees—possibly planted by Washington. We have also learned that English Holly is being grown commercially on the west coast and is being shipped in small quantities as far east as Chicago. Some sprays were sent to us last Christmas and the fruits were planted. A few English Holly trees have flourished in the east, notably at Trenton, New Jersey, and at spots on the north shore of Long Island.

The growing of Christmas greens in the South presents a rather special problem. Southern Holly (Ilex opaca) varies considerably from year to year, depending on the localities from which it comes. Several years ago we planted some very lovely, brilliant red berries, specially selected for their beauty and abundance. The accompanying photograph shows the growth that seedling plants have made in four years. It appears to be a well-established fact that young plants grown from seed of unknown but presumably of southern origin require protection until well established, and flourish best when sheltered from cold winds.

SOME of the native Winterberries seem slow in germinating or fail altogether. The red berries of Cassena, which ranges from Virginia to Florida, were being sold in New York City last Christmas. Some of these berries were planted and the young plants—barely a year old yet—are now six to eight inches high. We shall try them out-of-doors in some warm sheltered place in the hope that they may prove hardy.

The Japanese Winterberry (Ilex serrata) has grown quite well in the shrubbery plantations of the New York Botanical Garden and one bush is fully ten feet high and covered with its very decorative and abundant small berries and leaves, making a less showy but very dainty contrast to the native species—I. laevigata and I. verticillata.

Ground-pines (species of Lycopodium) are hard to transplant. They require forest soils and probably some assistance from the root fungus—so that so far they have not been successfully cultivated.

THE suggestion that small tubbed nursery grown evergreens be used for Christmas trees has met with enthusiastic approval of many of our correspondents, and we have this summer seen some such plants that were successfully planted permanently outdoors after having served their festal purpose. All were growing and flourishing! The cold wet spring that prevailed generally last season was particularly favorable to the growth of newly planted evergreens.

The Mountain Laurel is the State Flower of Connecticut and its cultivation, its relation to forestry, the methods of planting and growing it, and the enforcement of the state laws for its protection are discussed in the publications of the Marsh Botanical Garden. Growing Laurel for the market to insure a steady source of supply and do away with the destruction of roadside beauty is part of the campaign. Fire is by far the worst enemy, and only an enlightened public sentiment and care will save not only the Laurel but much of the forest land. In fact, a forest famine is predicted within 25 years and with the disappearance of our forests will go many of the charming plants of our woodlands.

Signs of an awakening public action in defense of our native greens are cropping up here and there, and not the least encouraging thing is that trade organizations and similar associations that have material at stake are keeping step with events, as when the Society of American Florists goes on public record in favor of restraint and conservation.

The following resolutions are encouraging and timely:

RESOLUTION

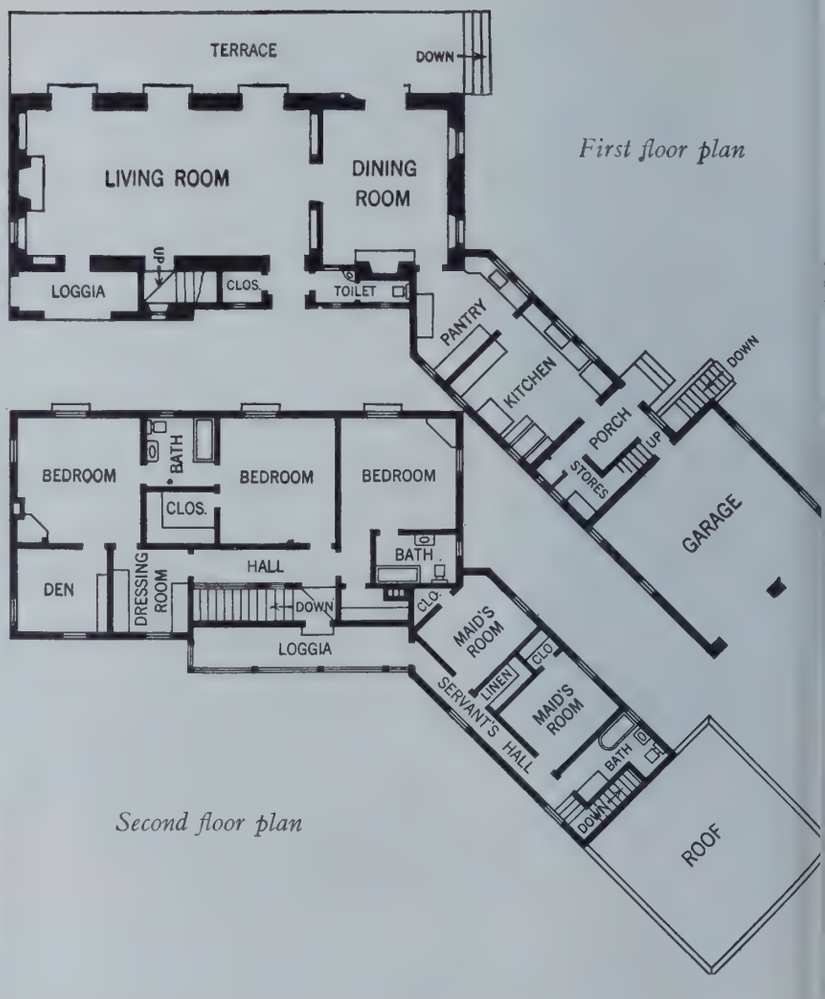
WHEREAS: It is a well known fact that the native plants of the United States, such as Holly, Ground-pine, Mountain Laurel and Toyon (Christmas Berry) etc. are becoming scarcer each year through their ruthless destruction on the part of the people who consider their immediate demand as deserving of consideration first;

WHEREAS: The continued cutting of these greens and berries denudes the landscape and not only threatens them, but other beautiful things in plant life, with destruction;

BE IT RESOLVED: That we, the Society of American Florists and Ornamental Horticulturists, hereby put ourselves on record as lending our aid and coöperating in every possible manner to restrict the cutting and sale of the above mentioned plants;

BE IT FURTHER RESOLVED: That our organization will give its unqualified endorsement to having restrictive laws passed in our respective states to prohibit the merciless destruction of our native flora.

EARLY Spanish design dominates this Santa Barbara home and pleasingly demonstrates the success of that type of architecture in the environment of the Pacific Coast. The Spanish feeling is carried into the interior decoration and the use of tile and rugs as shown in the picture below furnishes interesting detail. The dining room has an antique beamed ceiling, and again tile is used for the floor, consistently expressing the Spanish motif



First floor plan

Second floor plan

The
acific Coast Home
of
R. IRVING WRIGHT
at
ANTA BARBARA, CAL.

EORGE WASHINGTON SMITH
Architect

Photographs by
J. W. COLLINGE

DO LAWNS BELONG

IN SOUTHERN CALIFORNIA?

LOCKWOOD DE FOREST, JR.

Landscape Architect

ALMOST everyone is familiar with the advertisement showing the world in the process of being covered with paint. The same effect results when lawns are spilled indiscriminately over our California hillsides. Lawns have become so much a part of the garden scheme that they are used without adequate thought by most of the people who lay out estates in Southern California. Because of the low annual rainfall, which comes only during the winter months, the natural scenery is brown for most of the year. The easterner accustomed to much green feels this to be an objection and plants lawn indiscriminately over his estate. The result, for most of the year, if the grounds are on a hillside, and visible from a distance, is of an overturned can of green paint. The lawn as a foundation for a naturalistic garden scheme in Southern California is based on a false note. In England, where the naturalistic style of gardening originated, the lawn is the natural expression of the country and was the logical foundation for naturalistic gardens there. But here in the South West it is as foreign and unnatural as the most formal development.

THE climatic conditions of Southern California are not dissimilar to the Mediterranean coast of Spain, France, and Italy. A study of the older gardens in Italy will show very little use of lawn. To be sure, most of the old gardens were of a formal character; it was not until the English gardenesque style swept Italy that so-called naturalistic gardens were made and lawns were used. A study of the gardens in Italy shows that this older type of arrangement brings about a greater harmony between the house and the natural landscape.

Surely the lawn is a foreign element in the countries just mentioned and is as surely a foreign element here. No foreign element can be used as a successful part of a purely naturalistic treatment. No formal or semi-formal treatment makes a suitable foreground to an entirely foreign near middle-distance. If these facts are kept in mind the proper use of the lawn in the gardens of Southern California is assured.

THE practical consideration of lawns in California imposes many more limitations than the artistic. Lawns have to be artificially watered most of the year. This means a high upkeep expense in labor and water, or a high installation cost of a sprinkler system to take care of the watering. In many communities, lack of water or low pressure makes a sprinkler system out of the question. Our lawns are not permanent; they do not improve from year to year until they make a glorious sod, as in England. Every so often they die out or get into such a condition that it is advisable to replace them. These considerations make a large lawn prohibitive to most people and inadvisable to many more. A perfect lawn makes an unequalled green carpet, but a weedy, half-green lawn is only one degree better than bare ground, the one degree being prevention of dust. Don't plant more lawn than you can take care of.

The problem of an artistic use of the lawn resolves itself into screening it from an inharmonious natural landscape of bare brown hills. The problem is simplified somewhat if the garden is located in a valley or on fairly level ground. Tall shrubbery of any kind will hide all but the mountains, and in Southern California the variety of shrubs obtainable is so great as to make any combination of texture and color of foliage possible. A screen in a formal development is most easily obtained by a wall, or fence, or hedge. Large hedges can be produced quickly here by using Monterey Cypress. The effect is similar to the Italian Cypress screens used in Italy, but attained very much more quickly and with much less expense. There are numerous other satisfactory hedge materials, but none as rapid growing or as cheap as the Cypress. The problem of the lawn area on the hillside or hilltop estate is often the most difficult to solve satisfactorily. One of the most common solutions is the lawn terrace ending in a balustrade or wall. There is no better setting for a somewhat formal residence. An objectionable middle-distance can be screened by a planting of trees below the terrace. There are many varieties of trees that grow so rapidly that the expense of screening from below is nominal and amply repays the time spent in waiting for a finished effect. From a practical standpoint this is an ideal arrangement, as tree or shrub roots are eliminated from the lawn. Trees of rapid growth are of necessity gross feeders and only with difficulty can the ground beneath them be kept attractive. By having the trees planted below the lawn terrace, the unsightly area at the roots is hidden.

The more common of the drought-resistant, rapid-growing trees that require little or no attention after planting are: the varieties of Eucalyptus, most of the Acacias, Monterey Pine, and Monterey Cypress. Another customary solution is the Mall, or Allée, of lawn bordered by flowering shrubs or flowers, backed by ornamental trees or an orchar and ending in a pergola or some architectur feature. If the slope of the hill is not t great, this makes a very attractive schem The upkeep of such a development is great than that of the lawn terrace although tl first cost is often less. The informal law on a hillside is very difficult to handle. can be very beautiful where it makes a bac ground for the shadows of large Oaks or oth trees, but unless the feeling of nearness the glorious purple and gold hills is remove a semi-formal development will prove mo in keeping than absolute informality.

THE most logical place of the lawn on tl Southern California estate is immediate around the house, as a ground cover where tl surrounding planting cuts it off from near-b foreign elements, or as a carpet in a cor pletely enclosed area removed from the hous The small economical lawn leaves a large ar to be developed in some other manne A succession of gardens is often effective b always expensive to build and maintai There can be rose gardens, flower garden herb gardens, vegetable gardens, Spani gardens, and varieties of formal and sem formal gardens without end. Lawns may l used effectively in many of them and no e pense be spared. But a problem arises wh the owner of an estate wishes to work out a effective planting that can be maintained wi a minimum of labor and expense. Drough resistant shrubs are the most economic ground cover to maintain here. They mal an interesting transition from the house ar lawn to the native hillsides. The materi that is most natural is, of course, the nativ shrubs themselves. Ceanothus in variety, t California Holly or Christmas-berry, the Wi Cherries, the Wild Sumachs, and the Coffe berry are among those most often used.

There is a wealth of material that harm nizes well with the foregoing imported fro all over the world: Leptospermums, Pit osporums, Bottle-brushes, both the Call stemon and Melaleuca species, from Austral and New Zealand; varieties of Cotoneast and Pyracantha from China; Rosemar Spanish Broom, the Strawberry Tree, Medite ranean Heather, Portugal Laurel, Butcher' broom from the south of Europe; and othe from Africa, Asia, South America, and Mexic It would take volumes to mention them a but it is easily seen that the greater part the Southern California estate can be su cessfully, attractively, and economicall planted without lawns.

A PERSONAL VIEW OF CALIFORNIA GARDENS

FRANK A. WAUGH

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Photographs by the Author

An enclosed courtyard in a Los Angeles garden where Juniper, Citrus, and Blue Nile Lily make a charming frame for the lily pool. Here Marliac Water-lilies, Arrowhead and Acorus nod to the flowering plumes of the feathery Pennisetum, with Petunias and Candytuft blooming profusely

COMPARISONS are odious; yet after long deliberation it seems that the best way to tell about California gardens is by comparing them with other gardens. And since these estimates are by compulsion of circumstances largely personal I may as well frankly allow that I am expressing my own enjoyment and sense of delight in California gardens; and further that the comparisons are for the most part with the gardens of the Atlantic coast states. Every estimate of course requires some standard of comparison; but these measurements need not be odious unless an attempt is being made to prove one section better than the other. Such intention is farthest from my wish. Because arguments have arisen on this point I ought to be permitted to say that I think it worse than futile to try to prove any superiority either for California gardens or for those of the East. Neither one can be anything without holding to its own character—without being itself—and each one is successful largely in proportion to its honesty. In brief, California gardens may be compared with New England gardens, but they should not be judged by New England standards.

NOW the first thing I feel in California gardens is their independence. Perhaps this is one of the best things. It is more noticeable in domestic architecture than in garden design, but the two go together. Southern California in particular is now engaged in one vast and spectacular experiment in domestic architecture. There are Spanish styles, Argentinian houses, Italian villas, French rococo, Mexican haciendas, Indian pueblos; even Egyptian tombs, Tut-ankh-amon style. Some of them are pretty wild. Some are intolerable freaks. The best Californians will admit as much. But some of them strike twelve! A certain percentage achieve dignity and refinement, and a larger number are interesting, some truly tantalizing. At least everybody feels free to try new ideas, and this is a first condition of progress.

Along with these experimental essays in domestic architecture come naturally and necessarily similar experiments in gardening. In some instances we may find very clever attempts to make the garden correspond in its style and atmosphere with the house, be that style Byzantine, Greek, or Aztec. So much urgent experimenting in new garden motives must certainly yield some results worth while, especially if one is willing, as I am, to overlook a lot of mistakes for the sake of an occasional brilliant success.

GENERALLY speaking, California lawns are much better than the Californians themselves have believed. At this point the Native Sons, usually so confident, are inclined to qualify their claims. I have often heard them say that of course theirs was a dry country; water costs money and lawns have to be small or poor or both. After an extended survey I am unable to justify this pessimism. Whether one considers the small front lawns along the ordinary residential street or the more spacious grounds of private estates, the lawns of Los Angeles are not markedly inferior to these of New Orleans, Minneapolis, or Chicago.

California takes its place definitely with those civilized lands where the lawn is the foundation of the garden. It would be interesting to consider this subject technically with reference to the species of grass cultivated and the methods of lawn-making adopted, but this would require a lot of space.

A SECOND comparison, and a very important one, is to be made in the use of shrubs. It is frequently pointed out that California cannot successfully use the deciduous shrubs, such as the Spireas, Honeysuckles, Weigelas, Deutzias, and Forsythias, on which Eastern landscape architecture leans so heavily; and it is assumed by Easterners and Californians alike that this fact must change the whole character of garden effects. Yet such a result by no means follows. The substitution of evergreen shrubs like Escallonia, Abelia, Osmanthus, Pittosporum, and Coprosma, for the afore-mentioned Deutzias and Spireas might seem revolutionary when considered botanically; but when all those

A classic purity of line distinguishes this simple pedestal and urn. Against the dark green background of Cypress and Laurel it suggests the beauty of an Italian garden

good evergreen species are growing lustily in somebody's garden in Pasadena or San Diego the general garden effect can hardly be differentiated from the picture made by the corresponding deciduous shrubs at the height of the garden season in June or July. In other words, the skillful gardener gets the same results in California as in Pennsylvania even though using materials of very different genera.

IN THE matter of trees, comparison is hardly so easy. No single summary statement will cover all important facts. California has some fine trees, though many of those most commonly and effectively used are exotic, notably the Pepper-trees and the Eucalyptus. It seems to me that Southern California shows a definite and unaccountable reticence in the use of large trees. Most certainly all those miles and miles of small homes along the streets of Hollywood, Pomona and Santa Barbara do not have one-quarter so many large shade trees as would be planted on an equal number of home lots in residential suburbs of Philadelphia or Boston. Yet one would think that shade is more precious in Southern California. Californians with whom I have discussed this point admit the scarcity of trees and regret it. The only explanation lies in the statement that good species of shade trees are not at hand. The Eucalyptus are thought to be mussy (rather an unfair criticism) and the Pepper-trees are not popular. When native Live Oaks are available no one hesitates to adopt and admire them. The Black Acacia is a pretty good tree; the Olive has great beauty even if lacking in majestic size; and several other trees are well worth growing. It is fair to hope and expect that in the future, improvement will be made in the direction of a freer use of large shade trees.

Just a word about Palms. The novice gardener or landscape architect, first going into a subtropical country, must always be rather fascinated by the Palms, and is likely to find himself imagining all the stunty effects which might be produced by their aid. It comes as something of a surprise, therefore, to find how little store is set by them with the more serious minded and experienced Californians. And though I have spent only a few weeks in California, I have been there long enough to overcome my first enthusiasm for Palms and to join in the feeling of more cultivated and judicious persons that such odd plant forms had better be used rather sparingly.

But if there be some commendable restriction upon the use of Palms it does not extend to the popular Dracena (Cordyline indivisa) or to the Golden Privet. These are planted with the same frequency and tastelessness which characterize the use of Crimson Rambler Roses and Hydrangea paniculata grandiflora in the day laborers' gardens of the east. Probably it is always true everywhere, and always will be, that persons who lack garden education will show a preference for coarse, conspicuous, and freaky materials. In this also, California is very much like Ohio and Connecticut.

ON THE whole, therefore, the gardens of California look surprisingly like those of the east. Radical differences in soil, climate, and vegetation are overcome by even more radical similarities of taste and culture. The owners of small bungalows and 50-foot home lots are mostly immigrants from Iowa or Illinois with distinctly middlewestern ideas of what a garden ought to be. The good gardeners—and they are numerous—were trained in Philadelphia, Long Island, or even in England or Scotland, and they very naturally, as soon as they have mastered the new

By easy steps one is led up this gradual terrace where Cotoneaster Francheti and the brilliant Fire Thorn make a lovely garden picture showing the beauty that can be attained by trees and shrubs alone. Behind the Italian Cypress that stand as sentinels the house is set in charming seclusion

conditions, reproduce the garden effects to which they have been accustomed. And the landscape architects who have done notable work in California, are some times out-and-out easterners, or of eastern or European training. So that while California is quite willing and even anxious to be different, there are powerful influences operating in the opposite direction. And while the ardent importations of exotic architecture and the movie-theatrical tendency to exploit new styles, has some necessary influence on the accompanying gardens, the good taste and quiet restraint of the majority have largely neutralized such tendencies.

The people of California are still doing many new and interesting things and we may always find fresh ideas and endless inspiration there; but anyone who goes to that great country to find a generation of foreigners doing funny stunts may as well stay in Paterson, N. J. Eccentricities may be found anywhere; and the chance visitor is prone to seize upon such things and call them characteristic. But below these superficial appearances lies the permanent solid feeling of the community, and California gardens, no more than New York manners, are to be judged by what one sees from the street.

Like a garden from another clime this formal pool seems to dream and rest in Southern California. Guarded by stately Italian Cypress and Irish Juniper it is a mirror "where the sun is snared and the stars their star dust spread"

Box, Citrus, Cypress and Magnolia encircle this little Pasadena garden, lending a spacious air of privacy yet affording friendly glimpse of neighboring homes

AWARDS IN THE BETTER BOOK SHOPS CONTEST

WE ARE glad to report that the Better Book Shops Contest met a wide response and produced some valuable suggestions for the development of the Doubleday, Page shops. Answers came from every part of the country, from Bangor, Maine, to San Francisco, and from Michigan to Texas, also several from Canada, one from Ireland, one from England, one from China, and one from the Philippine Islands. Among the best suggestions were those for the development of a reference service, reading courses, a card index or other ways of classification, and more distinctive wrappings.

We regret that there is not space to print some of the excellent plans in detail, but we must content ourselves with giving only the names of the successful contestants.

The first prize, $250. in books of the winner's selection, was won by Miss Elizabeth Banks of New York City; the second prize, $100. in books of the winner's selection, by Robert S. Lynd of New York City; and the third prize, $50. in books of the winner's selection, by Wendell C. Hill of Washington, D. C. Ten prizes of $10. in books of the winners' selection were won by Mrs. Florence M. Morris of Toledo, Ohio; Mrs. Wilson Fitch Smith of New York City; Albert R. Crone of New York City; Earle C. Perry of St Louis, Mo.; Edward R. Rayher of New York City; Earl Landreth of Fort Bliss, Texas; C. Francis Beatty of New York City; W. L. Wemer of State College, Pa.; Norman R. Devisen of Englewood, N. J.; and Miss Helen Warren Harrison of Toledo, Ohio. Ten prizes of $5. in books of winners' selection were won by Miss D. Elizabeth McCutcheon of Dillon, S. C.; Gabriel A. Rapelle of Baltimore, Md.; Mrs. J. H. Raesgen of Williamsport, Pa.; Arthur V. McDermott of New York City; Mrs. H. P. Corey of Rayville, Va.; Miss Maye C. Wallace of Topeka, Kansas; Carol Rix of Moorestown, N. J.; Mrs. H. Edward Conover, Jr. of Montclair, N. J.; Barrett C. Kiesling of South Pasadena, California, and Miss Lucile Thorn, of Cleveland, Ohio.

FURNISHING THE CHILD'S ROOM TO PLEASE THE CHILD

AMELIA LEAVITT HILL

Author of "Redeeming Old Homes" etc.

Taking the Point of View of the Young People Themselves Instead of Merely Satisfying the Aesthetic Sense of the Parents

THE nursery has, perhaps longer than any other room in the house, been the home of conservatism. While it is a truism in decoration that the first function of any room is to conform to the tastes of those who are to occupy it, this room alone remains, and has remained, in spite of the increasing study and taste manifested every year in the art of interior decoration, an exception to the rule. We have all laughed at the witticisms, familiar to the comic press, of parents who play with the children's toy to the exclusion of their progeny, or who attend the circus with enthusiasm under the thin camouflage of "amusing baby." The same spirit has, however, penetrated into the adornment of the room assigned to the use of the children, and here its results are, far from being comic, really unfortunate, since the former phase only inconveniences the little ones now and then, while the latter forces them to inhabit permanently apartments which they find profoundly uninteresting.

The first thought of any mother—and naturally so—is to make the nursery an enlargement of the baby basket—a mass of fluffy pink-and-white or blue-and-whiteness, as dainty and charming as can be devised, with snowy walls hung with charming pictures of sleeping infants and with the most delicate of odors and elusive of motifs combining to form—as they do to the adult—a delightful whole. Conversely some decorators, who have seen the banality of such decorations—from the juvenile standpoint—but who have seen no more, have not only eliminated these charming details but have gone to the other extreme and planned nurseries which are as near indestructible as rooms can be. These decorators advocate dreary places painted in dark colors as far as little hands can reach, with dull-hued furniture to save possible glare on baby eyes, strictly sanitary floors of linoleum without the single protecting presence of one friendly rug and even, in some cases, porthole windows of stout glass to withstand the occasional ball or pillow. Poor little people, penned up in such utilitarian prisons! Is there no medium between such painful efficiency and the too-destructible daintiness which bores its little occupant?

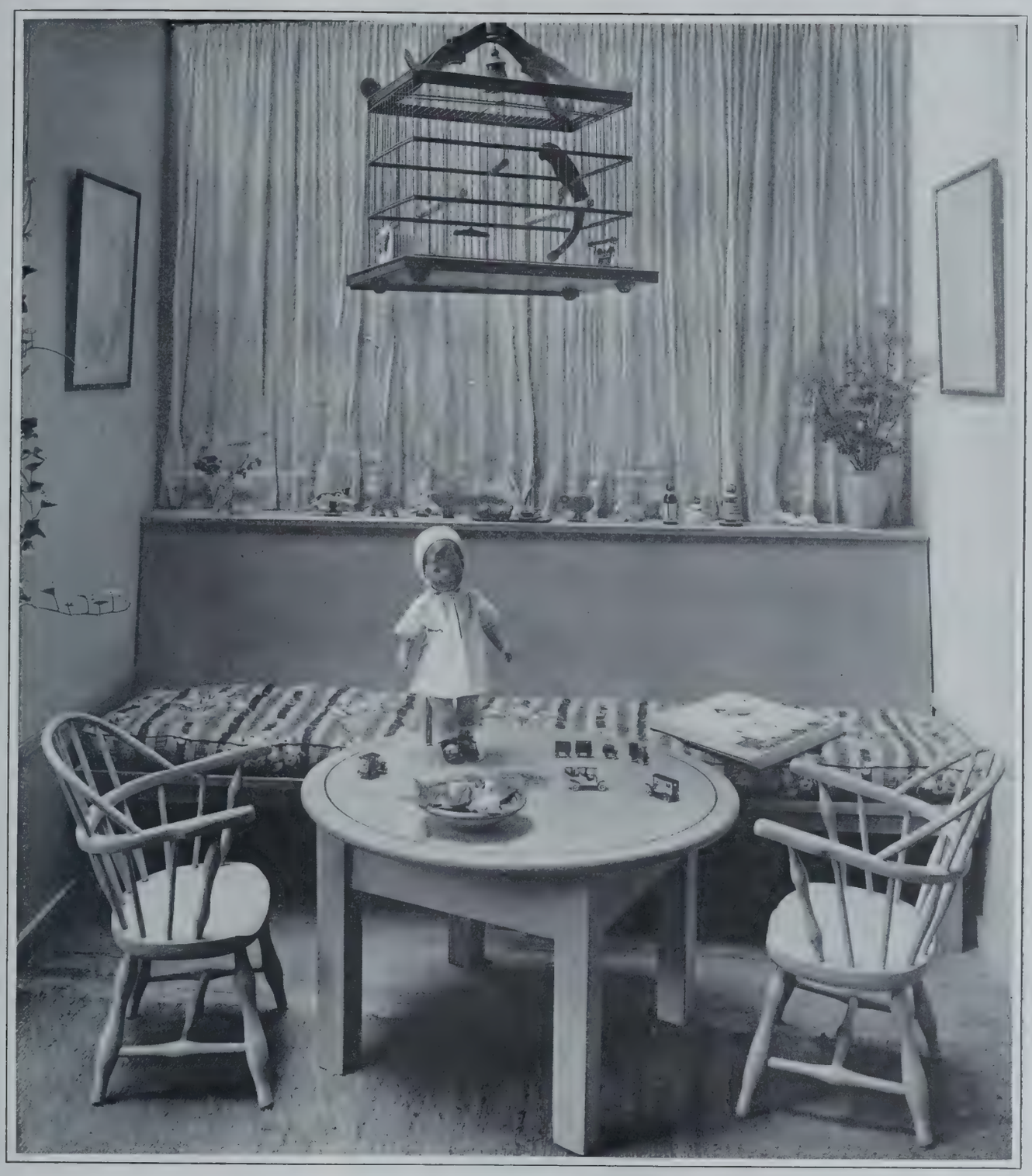
THERE is no reason why rooms meant for children should be less pretty than the others in the house and not be serviceable and practical as well. Consider what pleases the little people, and approach the problem from that angle. Gay colors which are over-stimulating to the adult delight the child. One decorator in a paragraph of a most interesting volume describes a little girl's room in which its small owner took no interest while it remained in its conventional dainty dress, but which, when decked in gay red-and-white checked gingham, became the apple of her eye. Again—for there is a moral side to interior decoration as to everything else—there is a very considerable value in allowing children to have a part in the planning of their own rooms. Another well-known decorator and editor recently gave a most interesting account, based on this very point, which showed how such permission brought out hitherto unsuspected interests in the minds of various children. One child, by his anxiety for a certain picture, revealed an interest in music which his parents had not known that he possessed; another gave signs of a surprising eye for color and color combinations; in short, in each of the several cases cited the child not only contributed something personal to the decoration of his room, but showed, in a greater or a less degree, abilities worthy of cultivation which seemed likely, under proper training, to play a considerable part in his future life.

Let us see how a nursery may, then, best be planned so that it may interest its little occupant, apart from the personal worthwhile touches which he will himself contribute. In the case of the walls, for example, there are many papers well suited to children's rooms. Some consist only of a narrow frieze, which can be used with almost any type of plain or self-figured side-wall paper, and which show children at play in silhouette or in gay hues. There is, too, a delightful frieze of Mother Goose scenes, the rhyme printed beneath each one in Old English lettering, and these are sure to interest the little people, especially those to whom either rhymes or letters are familiar. When a frieze is used in the nursery, it should be hung at least a third of the way down the wall, so that little necks may not be craned about to see the pictures distinctly.

OF ALL-OVER papers there is a very amusing one of fairies, or rather, tiny gnomes, who are busied about their daily life, one group showing, for example, a baby fairy being administered medicine out of a spoon. There is an English paper over which Mother Goose scenes are sprinkled, each with a few words of text, and another of Kate Greenaway inspiration, picturing the months. It is, of course, important to choose a paper which is interesting to the children rather than to their parents; but with the wide range of designs now shown, this result may be attained with no sacrifice of artistic effect. Of course in the nursery, as everywhere else, where figured papers are used, plain hangings will be in order; and for this reason we are inclined to advise a frieze with plain or striped sidewalls, since perfectly plain curtains would be utterly uninteresting to the childish mind.

The walls planned, the question arises of rugs and furniture. For the former, one of the hit-or-miss rag rugs will be the best choice. True, they are less durable than carpet; they are durable enough, and may be replaced at less than the cost of the ordinary carpet rug, since a 9 x 12 rug of this type can be had for about thirty dollars. These are suited to the nursery both because of the pictured designs woven across the ends, and also because when soiled they may be easily laundered. Of course a large rug affords a far safer footing

The child's room having furniture such as this will make an ideal play place. Both chairs and table will withstand hard knocks and best of all they will not upset easily



In such surroundings as these the long, long thoughts of childhood can only be of the happiest. It is a real play room where the boundless energy and mischief of little people can have full sweep

then several small ones. The plain wooden floor may serve as a base for it, or if desired a base of linoleum is both durable and easy to keep clean.

Nursery furnishings are certain to receive hard wear; and for this reason painted furniture will be found better than the natural wood, since it may be more easily kept in order. There should be a bed, when the baby graduates from the crib, bureau, chiffonier, table, and various chairs, which latter should be stout enough to withstand considerable wear and tear. There should also most certainly be a comfortable easy chair where mother may hold the children to tell them stories, sing songs, or minister to any real or imaginary ills. A large chest where playthings may be stored when not in use will also be found indispensable, and will furnish the little ones with valuable training in the task of "picking up." If the child be old enough, there should also be a little desk or writing table, furnished with one of the delightful wooden desk sets, each piece of which is adorned with the head of Peter Rabbit, a kitten, a puppy, or a mischievous little girl, a real bow of gay ribbon run through her carven yellow hair.

A SMALL bookcase will help the children to care for books and to keep their favorite volumes about them—lessons which they cannot learn too early. There should also be a space in some corner set aside for toys which are not to be put into the chest every night—the doll's house, for example, or the doll's bed and bureau, which her little mistress feels, and rightly, are an integral part of her own room, and which, for her own best comfort, must form a part of it. Perhaps we may again stress the point that the nursery is primarily for the use of the children. It need not be disorderly, but the things which

they love should be about them, even if the perfect symmetry of the room be somewhat marred thereby. Apart from the lessons in neatness which the little girl must learn—and which, in the case of the baby house and the doll's room, will doubtless be all the more firmly implanted in her mind by being passed on as they are sure to be, to her doll—there are certain toys which may perfectly legitimately find a place outside the play chest, if only their corner be kept neat.

Returning again from the domain of toys to that of painted furniture, let us consider the best color which will at once be pretty and wear well. To avoid white furniture on the ground of eye strain seems over-captious, and we are inclined to think that color the best from both the practical and the decorative standpoint. The chief objection to its use—its tendency to show grime and dust—is an asset rather than a drawback in the nursery, where the aim should be to have everything as hygienic as possible. If white be objected to, however, pale gray is most effective, while there is a color known as "coral"—really more resembling cafe-au-lait or amber—which is very attractive. Since gay colors please little people, there is no reason why they should not be used. This does not mean that the furniture should be garish or color contrasts crude. It will often be found possible to brighten gray or amber furniture with an occasional band of gay color or a bright painted fruit or flower in a way which will appeal to the aesthetic sensibilities of both old and young in the family circle.

WHEN we come to the draperies let us first consider the glass curtains. These are best in the two-tier Dutch effect, since when run on two sets of rods either the lower or the upper tier may be drawn aside to admit more light without revealing the entire apartment to the gaze of those without, as is the case when one curtain covers the entire window. For over-curtains a very attractive novelty, and one which is always productive of great interest to the little ones, is to use unbleached muslin, which is soft enough to hang in graceful folds, and upon which figures of birds and animals may be stencilled.

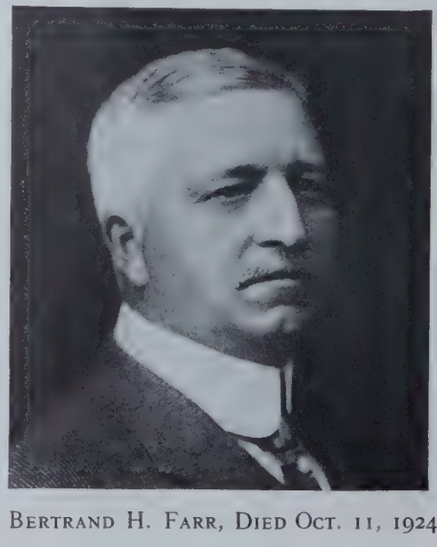
This is really a simple process, and its results appear far more elaborate than the amount of work involved would suggest. If stencils of the designs you wish cannot be found ready made, they can be cut to order, or if you can draw or copy the design upon heavy wrapping paper and cut out the outline silhouette fashion, the remaining paper will form a home-made stencil which will perfectly serve its purpose. The stencil should be applied over the cloth in the desired places and held firmly in place with thumb tacks, a heavy blotting paper being between the cloth and the table top beneath. The paint is ordinary oil paint, thick enough not to run, but not so thick as to make the cloth stiff. One brush must be supplied for each color applied through the openings in the stencil with a round brush and a rotary motion until the space to be colored is completely tinted. The stencil then is carefully lifted and the design will be found complete upon the cloth. A little shading in another hue may be applied by free-hand drawing when the first color is dry, and it is well to have a small quantity of turpentine at hand through whose agency spots of paint which escape the boundary of the stencil may be removed. It will also be found well to experiment a little on a separate piece of cloth before attacking the draperies, though skill will be found to come surprisingly fast, and the process is an effective one in result and an entertaining one in fulfilment. Draperies and bedcover made after this fashion, covered with animal and bird designs perhaps four inches high will hold the attention of the little ones for a long time and will be found really charming from the decorative viewpoint. The process may be imitated by the use of embroidery or applique; but the work is more difficult and no more satisfactory. As a final finish the draperies and cover may be bound with sateen the prevailing color of the room.

In furnishing the nursery one caution should be given. We all remember in our very young days the fright which some picture, to our elders merely comic, caused us, and the uneasiness in its presence which we were often ashamed to own. Therefore, before adopting any fantastic or grotesque effect in our decorations, let the children see it and give their opinion. The suggestion of fear need not be made to them, it will manifest itself if it be there, but by all means be sure that it is not, for to force a child to occupy a room containing anything which frightens it is one of the most cruel ordeals to which it can be subjected, nor is this a matter upon which reasoning will avail. Only recently a leading New York store displayed a picture, ostensibly for the amusement of children, which would, we are sure, have long dwelt uncannily in the mind of any normal child, and which, even to the adult, was over-grotesque. These weird aberrations of fancy should find no place in the child's room, which should alone contain what interests its occupants, pleases them, or is conducive to their welfare.

A MUSICIAN WHO BECAME A GARDENER

OSTENSIBLY an Iris hybridizer and a great authority on the Iris and the Peony, and by business pursuit a nurseryman, Bertrand H. Farr, who died October 11, 1924 was indeed a great deal more than all of these. He differed from all other specialists with whom I have had contact in that he was keenly interested in all kinds of plants. A trip to his nurseries, which were nothing but great gardens, or with him through other gardens, was always a pleasure because of the knowledge he had, as well as the love he manifested for plant life in all forms.

My last contact with him was at the pilgrimage of the American Rose Society to the Frothingham Gardens and to the Arnold Arboretum, both near Boston, during the last week in September. No Iris were in bloom nor were any Peonies in flower, but this genial and attractive personality was as keenly interested in Roses and in all the other plants of that season as though he had no other passion.



BERTRAND H. FARR, DIED OCT. 11, 1924

I have heard Mr. Farr make many addresses and always with edification and advantage. Though a tradesman, he was, in the language of the editor of this magazine, "one of those extremely rare men in business who could be absolutely and impartially honest in their opinions." It was this intelligent honesty that commended Mr. Farr to the many groups of plant lovers who have been advantaged by hearing him.

Not many men have seen so much happen in a comparatively short period of years as did Mr. Farr. Aiming for a musical life and gradually getting into a musical business relation, Mr. Farr's own nature reacted in him so as to bring him into the plant associations which will make his name long famous in American horticulture. He was, as one of his friends has expressed it, virtually "a milestone of horticultural progress."

J. HORACE MCFARLAND.

DAHLIAS THAT LEAD

Picking the Best from the Host of Novelties and Known Favorites That Stood the Test of the 1924 Shows

THE 1924 Show of the American Dahlia Society (held at the 71st Regiment Armory New York) September 23rd, 24th and 25th was the finest and most spectacular display of the flower yet staged. For the first time in the society's career, the exhibition hall was large enough to accommodate the various exhibitors who have desired for several years to increase the size of their exhibits

There were some excellent exhibits of Delphiniums, Gladiolus, hardy fall flowers, and horticultural specialties which suggested the possibilities of a general Fall Flower Show in New York. The American Dahlia Society has taken unto itself a real responsibility and has the vision of building its annual show into an important horticultural exhibit of a general nature—and it does not need to fear that the Dahlia will ever take second place in any such venture. In the words of President Vincent in his annual address "We've shown 'em what we can do, and we do not intend to take a backward step. The Dahlia is one of God's greatest creations."

In making a record of the outstanding varieties at the 1924 Show we present two lists, one of 1924 introductions, and one of earlier introductions that will remain on any show

MORDELLA (Decorative)
Apricot buff. Attracts instant attention through its sheer beauty of color. (King)

honor roll until more meritorious varieties take their place.

There were some noteworthy novelties not all of them 1924 introductions, but so far as the New York show goes they can be classed as such. There are so many new seedlings that one must be careful in giving any newcomer the right of free dissemination until certain that it is worthy. The desire to produce new seedling amounts to a disease, and its infections are manifest even in the amateur shows—where classes call for "groups of seedlings." No new seedling should be offered to the public, whether originated by commercial grower or amateur, unless that seedling possesses some quality entirely distinct from existing varieties, or, lacking that distinction, is an improvement on whatever existing variety it most resembles in stem, form, or keeping quality.

THE TRENTONIAN (Decorative)
Dark copper brown with flush of russet. One of the most outstanding novelties. (Fisher & Masson)

The Outstanding Novelties

ROBERT TREAT (Mueller)—Winner of the GARDEN MAGAZINE & HOME BUILDER sweepstakes prize for best variety never before exhibited at New York. "Robert Treat" is a clear red Decorative, very alive in color and of most distinctive appearance. It is midway between cerise and American Beauty red. A really great Dahlia. Beautifully formed flowers, good stems, and a most pleasing color. Altogether a wonderful introduction. (See illustration)

ELITE GLORY (Kennedy)—The most sensational Dahlia of the 1924 season. Was first shown at Red Bank, N. J., as a seedling in 1923. A monstrous flower with the credit of winning the prize for "largest bloom in show" at the New Jersey State show at Trenton and also at Red Bank. Strange to say, this gigantic flower is not at all awkward but is both pleasing and spectacular in appearance. And added to its other good qualities, it will keep remarkably long after cutting. The color is a brilliant rich red without any apparent purple or maroon shading. "Elite Glory" may almost be regarded as a "break" and assuredly is not surpassed for spectacular effect for exhibition or garden. (See illustration)

THE TRENTONIAN (Fisher & Masson)—A fine new Decorative with many qualities to recommend it, whether for commercial cut flowers or garden decoration. A rich dark copper brown with a flush of russet to recommend it for color. The blooms stand well when cut and the stems are long, straight, and strong. It is one of the finest Dahlias in existence. (Illustrated)

HARRY HOLBROOK (Smith)—Like Elite Glory this variety, which must be classed as a Decorative, presents something new in the Dahlia. It is a medium sized flower, with long petals curving back to stem with the unfolded new petals growing straight up. It looks more like some strange tropical exotic than a Dahlia, and has the added quality of a long keeper as a cut flower. The color is a pleasing combination of copper, bronze, red, and brown.

JERSEY'S BEACON (Waite)—A large distinctive Decorative. First of all it is a strikingly colored flower of brilliant scarlet with buff reflex, a wonderful red in a year when new reds predominate. Good stems and a most graceful flower.

MORDELLA (King)—For sheer beauty of color this apricot buff Decorative is a wonder. It has good stems, large graceful flowers, plenty of size and enough depth of color to make it a brilliant flower under artificial light and made many friends at the New York show. The commercial grower should find this a fine acquisition for a trade that calls for a clear autumn shade. (Illustrated)

PROFUSION (Burpee)—One of the most pleasing flowers in this year's show. A medium size Decorative of a flaming orange color with very fine stems. This Dahlia attracted a lot of admiration at the show and we predict general popular favor for it, especially as a cut flower.

MISS NEW YORK (Huntington Dahlia Gardens)—A particularly apt name for this attractive Hybrid-cactus. If there is such a quality as distinctive style in the Dahlia this variety possesses it. The color is dark rose. The flowers have long gracefully curled petals. Stems are good and the flowers have a particularly clean-cut appearance.

MRS. HERMAN (Waite)—A shaggy Hybrid-cactus. In color the same lovely rich rose pink that has made Jersey's Beauty such a favorite. This is an attractive flower and a most distinctive one.

SUN MAID (Hybrid-cactus)
This autumn yellow tipped red was the winner as "most artistic bloom" at San Francisco

MERVEILLEUX (Huntington Dahlia Gardens)—A large petaled pink Decorative shading to a very soft pastel shade at center of flower. This Dahlia will probably receive general public recognition for its many fine qualities; pleasing appearance, good stems, ships well, free bloomer and a producer of large blossoms under field-grown conditions.

MARGARET WOODROW WILSON (Fisher & Masson)—A pleasing opalescent silver pink Decorative and an unusual color. The reverse of the petal is several shades deeper in color than the face. This gives a soft colored flower real depth.

TALISMAN (Bessie Boston)—A lovely Hybrid-cactus of rich red tipped gold with golden reflex. A flower that shows much the same color combina-

tion as Islam Patrol. A distinctive addition to the Hybrid-cactus class.

MRS. ALFRED HARVEY (Sedgwick)—An exquisite rose pink Cactus that proved to be in big demand at the show. It is a most beautiful flower and a solid colored pink.

PAPILLON (Bessie Boston)—A large finely formed Hybrid-cactus of old rose shading to rich salmon. (We are including this variety among the 1924 introductions because no good ones were shown at the A. D. S. show last year, whereas it occupied a place of real honor this year.)

EMMA MARIE (Dahliadel)—One of the most pleasing exhibits in the New York show was the one in which this flower dominated. It is a finely formed pink and white Hybrid-cactus with an excellent contrast in the blending of the two colors. The pink is clear and definite and the white is without a trace of green. A splendid cut flower and ideal for basket or design work.

KATHERINE LYONS (Jost)—This is not a 1924 introduction but for the first time was shown in good form. The color is clear salmon rose flushed with both silver and orange shadings. The flowers are of fine form and substance. Altogether it has the qualities to make it a popular variety.

WONDERLAND (Bissell)—Dark garnet red Hybrid-cactus, with long shaggy petals. The reflex of each petal is a silvery garnet making a distinctive flower.

JOSEPHINE MENDILLO (Jost)—A brilliant red Hybrid-cactus that seems to be an improvement on Kalif. This flower has fine substance, is a good keeper and for those who want a new commercial red, it is ideal.

POLAR SNOW (Harding-Marean)—Decorative, one of the best white Dahlias shown to date. It is a large flower of a peculiarly rich texture. A fine addition to the list of whites.

GLORY OF FLUSHING (Flushing Dahlia Gardens)—Although this beautiful Cactus was shown last year it deserves to be mentioned as a 1924 introduction because the blooms shown previously were unfair to the variety. It is to be especially commended as a Cactus because of its splendid stem, as stiff as that of the best Decoratives, and its attractive coloring, a real gold shading to a tawny orange center. It is a prolific bloomer.

ELITE GLORY (Decorative)

The most sensational flower of the season. Deep glowing scarlet, measuring eleven inches in diameter. (Kennedy)

OLDER VARIETIES STILL GOOD

IN RECORDING the outstanding Dahlias in the 1924 show, it is indeed a pleasure to present a list which consists of some truly great varieties which have been in one or more New York shows previous to 1924. The varieties listed below are truly great Dahlias and unless some unforeseen break occurs it will be many years before they will be replaced.

JERSEY'S BEAUTY (Waite)—This pink Decorative that created such a sensation at so many of the 1923 Eastern shows deserves all the good things said about it last year, and then some. Undoubtedly, it is the finest of all pink Dahlias and created no end of admiration in this year's show. The graceful flowers, the splendid stems, the keeping qualities, and best of all the richest, softest rose pink color in any Dahlia.

SAGAMORE (Huntington Dahlia Gardens)—If it had been left to a public vote, this Decorative would have had a great chance of being voted the most beautiful flower in the 1924 show. Golden yellow on the outside petals it shades to a soft salmon at the centre and has every good quality known to the Dahlia, beautiful flowers, good stems, a winner of the Darnell cup in 1923 as a keeper, free bloomer, ships well, and an active seller as a cut flower, and withall most artistic. (Illustrated)

AMBASSADOR (Broomall)—This California bred Cactus has lost none of its distinctiveness. It ranks as the finest of its class. It can be grown on good stems to monstrous size and the star-like petals of salmon and gold place it among the most beautiful.

MARIPOSA (Bessie Boston)—Nearly every Dahlia grower has two or three favorites and it is not surprising to find this shaggy lavender-pink Hybrid-cactus as a general favorite. It comes sometimes more pink than lavender but late in the season the coloring is most likely to be shaded a pure lavender. It is like a piece of beautiful art work.

GIANT RUBY (Greinberg)—Again we place this flashy red Decorative on the honor roll, for it is the most brilliant colored red Decorative to date. It was a worthy forerunner of some good new reds of 1924 but not one of them comes up to it in color.

JERSEY'S RADIANT (Waite)—This rich saffron orange Hybrid-cactus will be a great flower for years to come for like Jersey's Beauty it has color, form, and substance to recommend it. One of the best of the autumn colored varieties and a radiantly beautiful flower.

EL DORADO (Bessie Boston)—There were flowers of this bright gold Decorative that were masterpieces of Dahlia beauty and perfection. The color and form would make us stamp this as the finest of all pure golden Dahlias and it is an ideal cut flower.

ISLAM PATROL—What a flashy Dahlia this is! And again we must give it a place of honor. The velvety rich red petals with their touches of gold have made this one of the most unusual of all the two-shaded varieties. Keeps well as a cut flower and shows excellent stems.

LORNA SLOCOMBE (Slocombe)—Again we place this in the honor list for its sheer beauty. It is one of those flowers that sparkle with autumn tints. Orange, scarlet, gold and russet, all combine to give it beauty. Many of the New York daily papers remarked on the beauty of this flower.

MARGARET MASSON (Fisher & Masson)—This large mauve pink Decorative showed great improvement over its 1923 form. It seems to be without an apparent fault and made a conspicuous spot of beauty in the Gold Medal exhibit.

WHITE SISTER (Stout)—Undoubtedly one of the finest of all whites. After a careful survey of the show we must say that a large basket of this Dahlia was about the most artistic exhibit in the entire exhibition.

MANDALAY (Jost)—A butterfly-like Hybrid-cactus of tawny gold shading to amber at the center, with a reflex of bronze brown. Excellent stems. A gem for real beauty.

EBENEZER (Vincent)—A well-formed Hybrid-cactus of rich cerise red. An excellent cut flower and a most pleasing one.

MRS. I. DE VER WARNER (Marean)—Still an outstanding variety. It has many good qualities, and our own special commendation goes to its clear mauve color. Did you ever stop to think that there are very few perfectly clear colored Dahlias? This is one of them.

AMUN RA—(Seal)—No Dahlia honor roll would be complete without this great Decorative. It is perfectly true that it has not proved itself a satisfactory commercial variety, but for sheer beauty and fine exhibition qualities it holds its place.

SHUDOW'S LAVENDER (Bessie Boston)—Lavenders come, most of them go pink—but this great Decorative was more beautiful this year than ever. No one of the Eastern exhibitors has ever realized the possibilities of this Dahlia for vase or basket decoration.

There were so many worthy trade exhibits

ROBERT TREAT (Decoralive)
Winner of "GARDEN MAGAZINE & HOME BUILDER" sweepstakes prize at New York. An entirely new color—American Beauty Red. (Mueller)

in this year's show that it would take a small volume to describe them all. But no report would be fair unless some are mentioned. The exhibit winning the Gold Medal for best trade exhibit was that of Fisher & Masson. It was an artistic triumph as a Dahlia exhibit and was by far the best all round Dahlia exhibit yet staged at the New York Show. It contained a representative display of both California and Eastern introductions, arranged in large baskets set against a background of gilded lattice work. Autumn foliage, Ferns, and evergreens softened the Dahlia colors.

The W. Atlee Burpee exhibit winning the Silver Medal surpassed the very high standard of previous Burpee exhibits. Staged by an expert showman it was a masterpiece of beauty and by many was considered superior to the Gold Medal winner.

Another most commendable exhibit was that of Badetty Bros. built largely to display the Dahlia Sagamore, and by a large number of people voted to be more artistic than either of the Medal winners. Undoubtedly, it had the most spectacular effect.

The Harding-Marean exhibit was another of especial merit. The effect was fine with a large vase of Polor Snow set in a gilded frame against a dark purple curtain. Some of the most interesting seedlings in the show were in this exhibit.

The Chas. H. Totty exhibit staged on each side of the entrance also deserves special mention for beauty and careful taste in staging.

The Dahliadel exhibit of their own introductions Emma Marie and Vineland deserves commendation. Practically every woman visitor to the show liked this exhibit with its soft colors.

We also commend the following: Waite, Slocombe, Alling, Meachan & Sherman, Kemp, Kennedy, Babylon Dahlia Gardens, Fraser, Stillman, Cottam, Mills, Smith, Vincent, Flushing Dahlia Gardens, Greinberg, The Dahlia Farm, Seltsam.

New Jersey State Show, Trenton, N. J.

SEPT. 19TH, 20TH

THE Second Annual Show of the Dahlia Society of New Jersey in joint exhibition with the Trenton Dahlia Society in Shriners' Temple at Trenton, produced one of the best shows of the year. The show was well staged and the officers of both organizations deserve the highest praise for the way they handled the combination. The exhibits fairly bristled with quality and nowhere this year, not even at New York, were there finer examples of vase and basket work. In fact, the Dahlia Society of New Jersey is to be highly commended for its encouragement of all long stem exhibits. The sooner every Dahlia show adopts this policy the quicker will be the progress in production of stem, foliage, and other qualities that will strengthen the Dahlia.

There were some wonderful trade exhibits at Trenton among them that of Fisher & Masson was perhaps the finest commercial exhibit of Dahlias in any Eastern show. It occupied "preferred position" on the stage of the hall, but for quality of bloom, range of variety including some fine novelties from both Eastern and California growers, and for artistic arrangement it has not been surpassed.

DAHLIADEL NURSERIES: an exhibit solely of one Dahliadel introduction, the pink and white Hybrid-cactus, Emma Marie, artistically arranged with a white background trimmed with evergreens. In the center a tall basket of Emma Marie that was as pretty as any vase or basket in the show.

J. A. KEMP: Here was a wonderfully fine vase of Robert Treat, the Dahlia that later proved the sweepstakes winner in New York. Wonderland, a shaggy dark garnet red Hybrid-cactus with silver reflex, Mordella, an apricot Decorative, Amun Ra, and several promising seedlings worthy of record.

WM. H. WAITE: As usual Mr. Waite's exhibit proved a real source of pleasure to the person looking for fine stuff. His new red Decorative Jersey's Beacon, Jersey's Beauty, Jersey's Gem, Jersey's Radiant, Jersey's Jewel, El Dorado, and a new rose pink Hybrid-cactus Mrs. Herman were the best varieties.

W. W. KENNEDY & SONS: The one outstanding feature of this exhibit was their new red Decorative Elite Glory—this big fellow won the prize for the largest bloom in the show—and it made its competitors look a bit out of place. Elite Supreme, the seedling winner at Red Bank in 1923, also showed up in good shape. It is a large Hybrid-cactus, with a metallic amber centre shading to orange and salmon on outer petals; a true "autumn shade."

NOTTINGHAM DAHLIA GARDENS: One of the most interesting exhibits at the show. It contained a most unusual new Decorative that is entirely different from any existing variety, Nottingham Beauty, a medium size, finely formed parti-colored purple and white. This variety has excellent stems and the color contrast is most pleasing. It was the prize winner as two-year-old seedling. It deserved it, too.

REINHOLD GREINBERG: The outstanding features of this exhibit were Giant Ruby the flashy colored red Decorative and Esther Holmes the beautified orchid pink Hybrid-cactus.

DR. F. R. WAITE: Some of the finest blooms in the show were in this exhibit and never have we seen a better Senorita. Dr. Waite also had a most pleasing new salmon colored Hybrid-cactus seedling Dawn, a graceful richly colored flower.

Other noticeably good blooms were: Caracas (Stout) a remarkable metallic amber Decorative with copper bronze reflex; Red Rover, Papillon, Shudow's Lavender, Penataquit, Esther Hunt, Ambassador, Elizabeth Butler, Mariposa, Francis Lobdell, New Moon, Islam Patrol, W. D'Arcy Ryan, Margaret Masson, White Sister, Mrs. John L. Gardner, Mabel Thatcher, Ballet Girl, F. W. Fellowes, The McGregor, Alexander Waldie, Siskiyou, Mrs. E. L. Lindsay, and El Granada.

Monmouth County Hort. Society

OCT. 1ST AND 2ND

UNFORTUNATELY the Red Bank show blooms clashed with the worst storm of the season on the day before the show. This year's show was a real horticultural achievement under the able management of Mr. Arthur Herrington. Dahlias, Gladiolus, perennials, fruits, evergreens, and implements

filled the Red Bank Armory with the kind of Fall Horticultural Show a garden lover enjoys. The exhibits of Gladiolius would compare favorably with those staged in the Gladiolus show.

When one sees the Red Bank show one sees most of the good Dahlias of the year. The premium classes are extensive and so arranged that they produce the keenest competition. The most impressive exhibit in the entire show was an exhibit of Jersey's Beauty staged by John Scheepers, Inc. All the flowers on long stems in vases, with a background of evergreens. An artistic and praiseworthy exhibit of this wonderful Dahlia.

The seedling prize went to a fine white Decorative The second prize seedling shown by J. A. Kemp was also a most promising flower, a silver shaded salmon Decorative, with long reflexed petals of fine substance. An upright flower on a long straight stem. These two seedling winners were about the best we saw during the season.

The prize for largest bloom in the show went to the new red Elite Glory, shown by W.W. Kennedy. It came near striking a snag in Siskiyou but won out on its superior depth and form.

The really outstanding Dahlias in the show were—El Dorado (the finest vase of this yet shown was in the Waite exhibit), Jersey's Beauty, Robert Treat, Mordella, Papillon, Elite Glory, Jersey's Radiant, Jersey's Beacon, The Trentonian, Margaret Masson, Mariposa, Jersey's Jewel, Amun Ra, Islam Patrol, Ambassador, Wonderland, Red Cross, Snowdrift, Robert Laurie Black, Violetta, Nobilis, Mr. Crowley, and Francis Lobdell.

Dahlia Society of California

SAN FRANCISCO SEPTEMBER 4, 5, 6

THE Ninth Annual Exhibition of the Dahlia Society of California held at the Palace Hotel, San Francisco, far excelled any previous effort. There were several new features worthy of note; a class known as the Amateur Novice Class; competition open to the city schools; the awarding of prizes for extra attractions on the second and third dates. The show was as interesting and beautiful on the closing as on the opening date.

The exhibit winning the gold medal for best general display was that of Jessie L. Seal. Most of the Dahlias used were the popular autumn colored varieties set against a background of trellis work and autumn leaves with a novel effect secured by a general use of Pompons in large brass opium bowls on tall iron tripods. A vase of Amun Ra in this exhibit won first prize for best 50 blooms in the show. To this display also went the Palace Hotel trophy cup for best collection of California Dahlias, namely, Amun Ra, Ambassador, California Superba, Champagne, Constancy, Earle Williams, Hathor, Kitty Dunlap, Susan G. Tevis, Shudow's Lavender, The Chronicle, and Tommy Atkins. In this exhibit were some interesting introductions from the East: Jersey's Beauty, Myra Valentine, and Mrs. I. de Ver Warner. Two of the outstanding Dahlias in this exhibit were Ellinor Vanderveer, a rose pink, and Olive Reed, a huge yellow, both new Decoratives.

The exhibit winning the second prize for best general display was that of Frank D. Pelicano & Son. This exhibit was staged in the most unusual manner with a liberal use of Palms, variegated Dracenas, and woven garlands resembling those worn by Hawaiians. The basket winning the first prize for the most artistic basket in the show went to a basket of Amun Ra trimmed with ropes made of Sunset Pompons and tinsel ribbon. In this exhibit also was Mr. Pelicano's sensational introduction Rollo Boy, a gigantic Hybrid-cactus of delicate amber shading to old gold. This not only won first prize for the best Dahlia in the show, receiving a silver medal of the Garden Club of America, but also won the prize for the largest flower exhibited.

SAGAMORE (Decorative)

A popular favorite of the shows. Golden yellow shading to salmon, and has good lasting qualities. (Huntington Dahlia Gardens)

DAHLIAS ON EXHIBITION

This display not only exhibits the flowers but demonstrates their decorative qualities and possibilities, an element all too frequently lacking. (Jessie L Seal, at San Francisco)

The exhibit of the Bessie Boston Dahlia Farm winning third prize for best general display was unique in that it exhibited only Bessie Boston introductions. The two-tone Hybrid-cactus El Granada won the first prize for best 25 blooms in show. Romance took first prize for best six fancy Dahlias. Also prize for best collection of unregistered seedlings went to this exhibit. One of the outstanding vases in this exhibit was a vase of Rookwood, the pure cerise rose Decorative.

The non-competitive exhibit of Carl Salbach, President of the Dahlia Society of California, was featured by large vases of Jersey's Beauty, Mrs. Carl Salbach, and Betty Bird. The silver cup for the most artistic exhibit went to the creditable display of Curtis Redfern staged in an oriental setting. The prize for best three-year-old seedling went to Faith Garibaldi, a large pink Decorative exhibited by the Golden Gate Floral Company.

The special prize offered by Doctor Tevis for most artistic bloom went to Sun Maid, a strikingly colored two-tone Hybrid-cactus in the Edymal Dahlia Farm exhibit.

Another display worthy of commendation was that of the Sea Cliff Dahlia Gardens in which the Dahlias Patience, a creamy white Hybrid-cactus, Lady Bowden, a lavender Decorative, and Rosey O'Moore, a maroon and white Decorative, were the outstanding varieties.

Other worthy exhibits were: those of the San Francisco Dahlia Gardens, Star Dahlia Gardens (featured by Pride of San Francisco and White Enchantress); Frank C. Burns in which his new Decorative of buff and straw shadings Meadowlark and the Oriole were features.

The non-competitive exhibit of J. W. Davies with a vase of Alma Davies, apricot and shell-pink Peony-flowered; Jean Robinson, lavender pink peony-flowered; Islam Patrol, red Hybrid-cactus tipped with gold; and Alice Varsinet, bronze Hybrid-cactus, for features. Lincoln Dahlia Gardens with Sun Kiss, a bright rosy salmon Hybrid-cactus, and Lily Grand, another new white Hybrid-cactus, for features; Spencer Dahlia Gardens in which the true pink Decorative Karma featured; the wonderful display from the estate of Dr. Harry Tevis consisting mostly of seedlings originated on his estate. The San Quentin prison Garden Beautiful had a yellow Decorative of real merit.

ALL THE YEAR ROUND IN THE CALIFORNIA GARDEN

Photographs by
FRANCES B. JOHNSON

ROSE GARDEN OF MR. GEORGE NEWHALL, BURLINGAME

This enclosed garden on a sunny terrace is devoted to Roses massed in beds, bordered with Box and ornamented with formal pillars of Yew trees. The Roses in the foreground are pink Caroline Testout, with a low growing variety of Cecile Brunner in great masses beyond

ALLISON M. WOODMAN
Landscape Designer

Here's a Practical Guide for the Busy Home Gardener With Some Surprises for the Newcomer—Disturbing Influences of Continuous Mild Weather That Upset Traditions

TO ATTEMPT a manual of garden work for California based on the life habits of plants as displayed in other parts of the country would be hopeless task. It is curious that flowering lants and shrubs, grown for generations in urope, or adapted to eastern conditions, tend o change their habits of growth when grown nder the new California conditions. Some upposedly strict annuals tend to become perennials; some deciduous shrubs, certain Rose- arieties, even fruit trees during mild winers, become semi-deciduous in habit, freuently retaining their leaves well into inter; the blooming season of many flowers extended considerably, in some cases conuously throughout the year; flowers freuently tend to bloom out of season, which ndency, however, is not always a desirable rait, and can fortunately be controlled by tting out plants at the proper time; succulent vegetables may be grown in the open round in the middle of winter! At the same me there are some operations which can be st done during definite seasons of the year.

One can always expect to find the unusual gardening in California. Old favorites of ie garden elsewhere may require different eatments under new conditions of soil and imate; it may take them several years to ecome thoroughly established, but when nce established such things occasionally utshine their sisters in the East.

In some respects December is one of the ost interesting and beautiful months of the ear. The hills and valleys are covered, uring normal years, with a luxuriant growth f grass; at times the atmosphere is quite almy. It is the time of year to really enjoy ie garden, without feeling that all spare oments must be utilized in working in it n early winter, if the weather is not too sere, color will be supplied by Violas, a sparse owing of Pansies, Wallflowers, Stocks (winter-blooming varieties), Violets, and the half-climbing Chorizema. Many of the berried shrubs are aglow with fruit: the showy Evergreen Hawthorns included under Pyracantha, especially P. crenulata with scarlet berries, and P. coccinea lalandi with orange-red berries; Cotoneaster pannosa with brilliant red berries, C. Franchetti with salmon-red berries, C. frigida with scarlet berries, C. nepalensis with bright red berries, and the dwarf forms, C. microphylla, with purplish red, and C. horizontalis (semi-deciduous) with bright red berries and others of the family; our own native Christmas Berry (Photinia arbutifolia), with immense clusters of brilliant red berries; the native Madrone, attractive because of its red berries showing against the mahogany colored bark; the native Snowberry; the English Holly with its exquisite red berries showing against the shiny dark-green leaves, in full berry at Christmas time; the semi-deciduous Berberis Wilsonae with its coral-red berries.

Some of the Heathers are in full bloom among them being the globular Mediterranean Heather, covered in winter with purplish pink flowers; Erica regermanes, with dark pink, and E. melanthera with lighter pink flowers, both attaining a height of seven feet or more.

As early as Christmas, and extending well into March, the Silver Wattle (Acacia mollissima or A. dealbata) is a mass of fragrant, clear yellow blooms. Acacia Baileyana, with golden yellow blooms and feathery foliage, is in bloom about the same time; the thorny Acacia armata and other species a little later. The well-known Blue Gum and other species of Eucalyptus are in full bloom.

It is well, however, at this time to clean up all dead stalks, leaves, and débris that is apt to harbor insect and fungus pests. Fruit trees are to be sprayed with lime-sulphur or bordeaux in December, if for any reason the regular fall spraying has been deferred. Peach trees, especially, should be sprayed not later than the middle of December.

WINTER PLANTING AND SEED SOWING

LATE January and the first half of February is a busy season for the Roses, fruit trees, and berry vines; deciduous trees and shrubs are ready for distribution from the nurseries. Since the seasons are not well-defined, and because of the necessity of their becoming well-established in the ground before warm weather sets in, all trees, shrubs, and bushes with bare roots should be planted out as soon as possible in winter. But well-established Roses and shrubs in pots, tubs, or cans may be set out at any time of the year if the roots do not dry out. Balled shrubs, dug from the field, may now be set out.

January sees us sowing seeds or setting out young plants of some vegetables and flowers, if the soil is not too wet and cold. Soil and climate vary greatly in different localities, and no two winter seasons are alike anywhere! The severity or mildness of the winter governs the time for sowing seed. Some vegetables under favorable weather conditions can be sown almost any time during the year, namely Radish, Beets, Spinach, Carrots, Lettuce, Parsley, Peas, and Collards. While seed Potatoes, Artichoke plants, Asparagus roots, and Rhubarb roots may be planted thus early and well into spring. Other vegetables sown in mid-winter in the open ground, in cold-frames, or under glass, include Cabbage, Kale, Broccoli, Kohl-rabi, and Cauliflower. In February, when the soil warms up sufficiently, it is time to sow in the open Celery, Asparagus, and Parsnips, and in frame, or hot-bed, or in a greenhouse, Tomatoes, Peppers, and Egg-plant.

AS EARLY SPRING OPENS UP

CONTINUED cold, cloudy, or rainy weather may delay seed-sowing of flowers in the open or may retard germination of

seed sown under glass. Under very favorable soil and atmospheric conditions the seeds of some kinds of flowers may be sown in a sheltered location as early as February, but it is usually better to sow seeds either in a hotbed, coldframe, or under glass, later transplanting the seedlings from flats directly into the garden.

Some of the flowers that may be sown early are: Pansy, Scarlet Flax, Freesia, Ageratum, Canna, Dahlia, Portulaca, Snapdragon, Verbena, Mignonette, Petunia, Morning Glory, Salpiglossis, Hardy Primrose, Salvia, Annual Chrysanthemum, Summer Stock, Annual Gaillardia, Nicotiana, Marigold. Annuals will grow larger and produce finer blooms when given an early start, and will bloom continuously throughout the summer if the old blooms are kept picked. Flower seeds sown late in spring tend to produce blooms too quickly as soon as dry weather sets in.

If neither greenhouse nor coldframe is available, sow flower seeds in the open when the soil becomes partially dried out and warms up sufficiently, and there is some indication of clearing weather.

Early spring is a period of intense activity for the gardener. March and April supply many surprises, for the garden and orchard may be fairly ablaze with color; also white and yellow Brooms, and a host of other shrubs, not forgetting the vast array of Tulips, Hyacinths, Daffodils, and other spring-blooming bulbs will be giving their bloom.

Open up the ground as soon as it is in condition to work, so as to aerate and partially dry out. Watch Roses for aphis, and dust with sulphur every two weeks to ward off mildew. Spray fruit trees, especially Apples and Pears, with a combination of bordeaux and lead arsenate as the buds begin to open, and once again when the flowers are fully expanded, to prevent the attacks of both fungi and leaf-eating insects.

This is the ideal time of year to put in the lawn when the soil is dry enough although lawn-making is by no means confined to spring, and a windy March will call for a mulch.

It is usually sufficiently warm about the middle of April to sow seeds of Cucumber, Squash, Pumpkin, Corn, Muskmelon, and seeds of Aster, Zinnias, and Cosmos for fall-blooming. Cuttings of Chrysanthemums and other succulent plants should be made during the latter part of March or in April. April is about as late as Gladiolus can be planted to furnish choice blooms.

Flower seedlings from sowings in late winter or in early spring are best planted in shallow boxes (flats) first; and, after having developed sufficient stem and root growth, they can be transplanted directly into the garden. The benefits are: a better stand; ease of cultivation; more vigorous plants; less susceptibility to pests; larger and more continuous bloom.

In the terraced garden of Mr. George O. Knapp, at Santa Barbara. A giant Live-oak tree which has split through a great mass of boulders on the border of a shaded walk

GARDEN OF MRS. WALTER COBB, MONTECITO, SANTA BARBARA

Rock garden planted in crevices of rough boulder steps leading from lower to upper terrace. The color scheme is white, cream and yellow with touches of orange and orange-pinks in the climbing Gold of Ophir Roses which garland the circular trellises

BLOOM ALL THE YEAR ROUND

CONTINUOUS bloom is the distant dream of many a gardener everywhere but in California this may be achieved. Transplanting young plants from flats directly into the flower border will greatly reduce the interval between the blooming periods of several lots of flowers. Inserting one lot of flowers between another lot of flowers in bloom will still further reduce the interval between blooming periods. Several kinds of flowers may be set out at the same time, coming into bloom simultaneously or closely following each other.

Few flowers are seasonal in bloom in California, that is tending to bloom at approximately the same time each year, but most flowers do show a tendency to come into bloom at a definite time from being set out in the garden. Fall-blooming flowers, like Chrysanthemums, Asters, Cosmos, should not be set out too early in spring, for they will bloom too soon. Canterburybells and other species of Campanula, also Foxgloves, Hollyhocks, Scabiosa, Sweet William, although occasionally producing flowers from plants set out in spring, will give the best results from plants set out the preceding fall.

For a succession of flowers throughout the year, and to provide color, some of the annuals can always be relied upon. Chief among these are Stocks, both winter and summer types, and Snapdragons (represented by many distinct varieties). Pansies and Violas are continuous bloomers, but should be planted the previous fall. Other good annuals include: Larkspur, French and African Marigolds, Cornflower, Poppies, Lobelia, Pot Marigold, Godetia, Mignonette, several species of Dianthus (Pinks), Sweet Sultan, Zinnia, Salpiglossis, Scabiosa, Petunia, Phlox Drummondi, Schizanthus, Nicotiana, Clarkia, Climbing and Dwarf Nasturtium, Calliopsis, Ageratum, Cosmos, Aster, Cineraria.

There are many beautiful combinations of flowers, using several kinds of flowers together, with appropriate border plants, which can be employed to advantage in the flower border. Gladiolus, especially the Primulinus and Ruffled types with Snapdragons, Asters, or Larkspur; Pansies with Violas, or Pansies with Tulips or Hyacinths; Verbenas with single Petunias, different kinds of

Bellflower grouped together; Clarkias with either Snapdragons or Gladiolus; Cornflowers with Scabiosa; Coreopsis with Calliopsis and Gaillardia, Daffodils and Forget-me-nots; Columbine with Delphinium or Cineraria.

The perennial or hardy border presents limitless possibilities, because of the wide range of flowers which can be used. Two flowers which should be used in every perennial border, and in every garden for that matter, are Delphiniums and Columbine, because of the rich colorings of the flowers themselves, their hardiness, the long-continued bloom, and the combining properties of the foliage. Pentstemon, because of its almost continuous bloom, is a very important member of the perennial border, if care be taken in the choice of colors. The mixed border, using annuals in front and perennials and biennials in the rear, is interesting, and will provide color in the garden throughout the entire year.

The more representative and easily grown flowers will include the Peach Bells Foxglove, Coreopsis, Gaillardia, Michaelmas Daisy, Hollyhocks, Shasta Daisy, Iceland and Oriental Poppies, Nepeta Mussini, several Blue Salvias, Scabiosa caucasica, the Statices, Meadow Rue, Perennial Phlox, Rudbeckia, Pyrethrum, Helenium, Evening Primrose, Coral Bells, Geum, Perennial Candytuft, Physostegia, California Tree Poppy, Veronica longifolia and V. spicata, Sweet William, Sea Holly (Eryngium), Single and Double White and Yellow Marguerites, Lavender, Peonies, Carnations, Pelargoniums.

Dahlias can be planted as early as March, but, to secure the best blooms in August, the planting should be delayed until May and success in our conditions lies in watering them constantly, with a plentiful supply of manure, adding the more concentrated fertilizers when the blooms are being formed. Other details are similar to those practiced in the past.

RESIDENCE OF MRS. F. F. PRENTISS, PASADENA

Rear façade of house and terrace overlooking the gardens in the ravine. This house is of rough stucco in a soft ochre color, and in a series of levels, conforms to the contours of the hill-side, seeming almost to melt into the rocks and soil of the ground itself

SUMMER GARDEN OPERATIONS

DURING the long, dry summer season in California much of the water in the soil can be conserved by some loose mulch on the surface, such as loose soil, straw manure, grass clippings, etc. Surface watering is not very satisfactory as a rule, for the water seldom penetrates more than a few inches which induces surface rooting of the plants. Thoroughly soaking by some means of sub-irrigation, and thorough cultivation afterwards, are of great benefit.

Summer pruning of fruit trees, although not favored by some horticulturists, has certain advantages in that it tends to promote the formation of fruit buds, and to keep the fruit tree within bounds. Fruit trees in the garden are very much benefited by the cultivation and watering given vegetables and flowers; experience will determine just what vegetables or flowers to plant close to and under fruit trees. Roses should be cut back somewhat and all twiggy growth removed during the summer months, they should also be given a period of rest during either July or August by partially withholding the water, but never permitting the soil to become entirely dry. Stake up stalks of flowers whenever necessary and cut down old stalks. Old flowering branches of deciduous shrubs, if not carrying new flower buds, may be pruned.

It is possible to put in lawns during the summer months, but more attention must be paid to watering, and to providing a sufficient mulch over the surface of the lawn. Shrubs may be planted from pots, cans, and tubs, but only when considerable root growth has been made. It is unsafe to dig shrubs directly from the field; Delphiniums and a few other hardy perennials can be dug from the field in full bloom, provided there is sufficient soil about the roots. However, it is a much better practice to transplant flowering plants from flats. Seeds of perennials and biennials should be sown during July and August to insure blooms next spring and summer.

PRUNING, PLANTING, AND OTHER FALL GARDEN OPERATIONS

THE fall season in California is very different from the fall season in the East, except at high altitudes along the eastern and northern boundaries of the state. The only indication of autumn is the gradual approach of cold weather, and an occasional coloration of leaves of vines and a few trees. Lawns can be put in successfully throughout the fall until heavy rains and cold weather set in. Fruit trees are pruned as soon as dormant; during abnormal seasons they may retain their foliage well into winter, and pruning is then done later. Ornamental shrubs can be pruned and thinned out to advantage in fall. Roses should be pruned in November or December, when dormant.

In late fall provide a good mulch of half-rotted straw manure around the perennials and bedding plants, and about the base of shrubs. The manure keeps the soil loose and provides fertilizer to produce abundant leaf and stem growth during the winter. All leaves, branches, and other débris apt to become a breeding place for insects is to be removed and burned.

For late winter or early spring blooming set out plants in October or November of Pansy, Viola, Wallflower, Larkspur, Dianthus (Hardy Pinks), Common Marigold, Primula malacoides, Snapdragons, Godetia, Calceolaria, Candytuft, Mignonette, Clarkia, Gilia, Scabiosa, and all hardy perennials and biennials. The latter will surely bloom next year, provided they have made sufficient root and stem growth during the winter; two exceptions are Columbine and the Chimney Bellflower (Campanula pyramidalis), which usually bloom the second year after planting. Sow Sweet-peas in October.

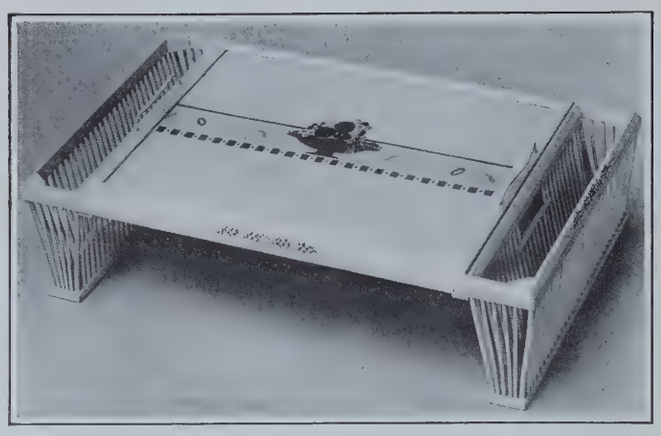
Gladiolus for early blooming should be planted in late fall and early winter. Bulbs should not be planted too early in fall if weather remains warm, to prevent too early blooming in the spring. About the middle of October or November, when cold weather really sets in, are the best times in which to plant bulbs of Hyacinths, Tulips, Daffodils, Narcissus, Jonquils, Lilies, Anemones, Ranunculus, Freesias, Crocus, and other bulbous plants. Depth for planting bulbs will depend upon condition and texture of soil. A light mulch over the soil is beneficial. Fertilize the soil with manures, but do not permit bulbs to come in direct contact with such material.

KEEPING THE GARDEN IN CONDITION

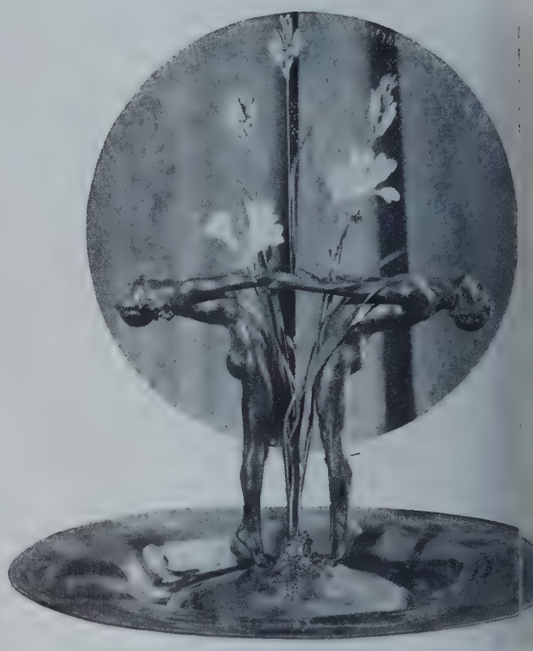
SUCCESSFUL vegetable culture requires a location with a somewhat southerly exposure as well as a suitable soil. Three essentials are: an abundance of fertilizers; sufficient moisture, adequate cultivation. The general run of flowers are not nearly as insistent in their demands as are vegetables.

To provide for a winter supply of vegetables sow during October and November seeds of Cabbage, Brussels-sprouts, Cauliflower, and other members of the Cabbage Family, Onion, Endive, Turnips, and the vegetables, such as Lettuce, Carrots, etc., which can be sown throughout most of the year. The soil acts as a storehouse for root crops, keeping them crisp during the winter.

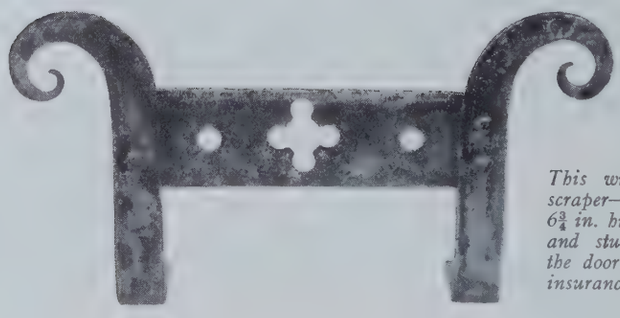
UNUSUAL GIFT



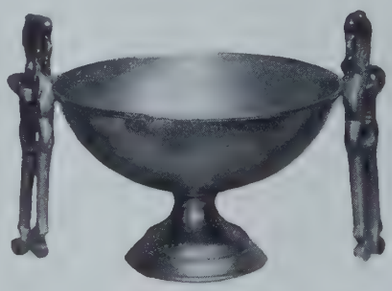
This unusual breakfast tray is of wicker 16 x 27 in., and may be had in six different colors. The glass covered tray is detachable and its reverse side cloth-covered for writing. The shape of the tray allows it to be of genuine service in serving an invalid and the side pockets for books and stationery will be appreciated



An elfin group—this—a bit of childhood's fleeting grace caught and held fast in this bronze vase. In this design a lovely sense of play is shown and although but 11½ in. high the vase is large enough to hold a most charming arrangement of flowers

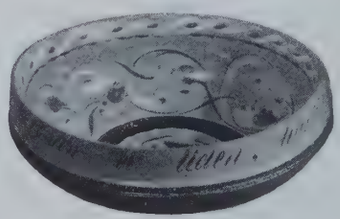


This wrought iron foot scraper—12 in. long and 6¾ in. high is both quaint and sturdy. Placed on the doorstep it would be insurance for hallway rugs



Capable of many uses are these two nut bowls. The lower one of wood was imported from Norway, and is cheery and gay in its vivid reds and blues. The upper one is of brass 7 in. across its top and the chanticleer crackers fit snugly into its handles

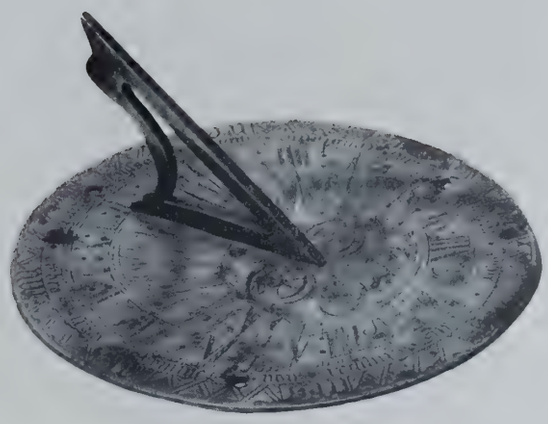
A most unusual combination of screen and serving tray is found in this convenient piece of furniture that may be turned up to make a table. Of solid mahogany finished in antique colors of dark red, blue, green, and black decorated with a Chinese garden scene in soft colors. It is a most attractive gift



There is no fun in having a fire unless you can poke it and watch the sparks fly up the chimney and here are brass poker and tongs, shovel and hearth brush with good long handles to make them most serviceable

FOR CHRISTMAS

Could anything be lovelier for almost any place in the house than this oddly shaped vase of fine rock crystal? Measuring 7 in. high and with a wire mesh to hold the flowers in place—it is infinitely serviceable



No garden is quite complete until it holds a sundial to mark in light and shade the passing of each happy day

With its background done in a golden brown finish on which is a Chinese garden scene in soft colors, this fire screen combines beauty with real utility

The cherished old rush bottomed chairs of another day with their wooden runged backs will be found more comfortable when one of these gay hand woven bits of color are tied over them

For summoning the guests to the dining room, could anything be better than this dinner gong of Chinese brass? It is on a black wood stand 7 in. wide and is large enough to make a resonant, far reaching tone

AS PART of the genuine service that GARDEN MAGAZINE & HOME BUILDER ever offers in each phase of home making, both indoors and out, it now earnestly desires to help with the ever puzzling problem of Christmas giving. Realizing that there is more to giving than just the gift idly or carelessly chosen, our Personal Service Department has selected these distinctive and unusual gifts pictured on these two pages. There is something here for both the garden enthusiast and for the home maker, something that is beautiful to give to one's friends or to have for oneself. As part of this service we shall be glad to tell you where these gifts may be purchased, just how much they will cost, and aid in every way to secure them.

This hand wrought fuel-holder in hammered brass is a substantial and portly fireside companion reflecting in its bright surface the crackling blaze in the fireplace wide

HELPING TO MAKE THE HOUSE COMFORTABLE

Things the handy man about the house ought to know

IN WINTER a storm door replacing the screen door will keep out much cold. Such a door can be bought, and for the front of the house is probably best. For the back and cellar doors very presentable storm doors of the batten type can be made of $\frac{7}{8}$-inch beaded pine sheathing 6 inches wide. For a 3 by 7 door only 31 square feet of sheathing and $7\frac{1}{2}$ feet of $\frac{7}{8}$ by 4-inch finish lumber for battens are needed. Three battens $2\frac{1}{2}$ feet long fastened across the top, middle, and bottom of the door will serve to hold the sheathing in place and stiffen the door. Place the top batten down 3 or 4 inches from the top and the bottom batten up from 6 to 9 inches from the bottom. Attach with nails or screws, and hang the door with the battens inside. Paint the door for a more finished appearance. If desired a window-glass, say about $1\frac{1}{2}$ by $2\frac{1}{2}$ feet, may be set vertically in the middle of the upper half of the door. If this is to be done, leave a hole that size in making the door, and hold the glass in place with strips of quarter-round moulding mitered at the corner joints and nailed into the edges of the sheathing with $\frac{7}{8}$-inch brads.

COAL BIN CONSERVATION

UNCOVERED hot water and steam heating pipes, such as are often found in the basement of houses erected by speculative builders, waste much heat in the basement that is needed in the rooms above. Cold houses and big coal bills are the result. Covering these pipes with asbestos or magnesia coverings is a simple and comparatively easy job which any handy man about the house can do in idle hours at small expense compared with the annual reduction of the fuel bill.

KEEPING JACK FROST IN HIS PLACE

METAL and wood weather strips around outside doors serve the same purpose as storm doors. They are not unsightly in appearance when finished to match the door, and, unlike the troublesome storm doors, are left in place the year around. The only storm door worthy of consideration is the combination storm and screen door with interchangeable panels of glass and wire screen cloth. Neither weather strips nor a storm door, however, quite take the place of an inside vestibule, or of a glazed vestibule with separate door on the porch, consisting of sashes made to measure which any handy man around the house can assemble with the aid of mouldings and screws.

TRY-SQUARES VS. EYES

CLEAN, square saw work in cutting off boards, joists, mouldings, etc., is partly the result of skill, but largely a matter of precaution and care. Do not trust too much to the eye. With a try-square and pencil, mark where a cut is to be made on at least three sides of the piece of lumber. Then saw carefully to these guide lines with long measured strokes of the saw rather than short jerky ones. It is important to have the piece of lumber held firmly in place while being sawed. If this cannot readily be done with the hand or knee and a helper is not available, a wooden screw clamp with which to fasten the wood to bench, horse, or table temporarily will prove a help.

HITTING THE NAIL ON THE HEAD

A SKILLED carpenter can measure the force of his blows so that the last stroke of the hammer will just sink a nail head flush with the surface of a board without leaving even the faintest suggestion of a hammer mark to mar the wood. If the amateur carpenter cannot do as well it is a good plan to apply the last two or three hammer strokes with a nail set. It must be used anyway on finish work where the nail holes are to be filled with putty before painting or varnishing. To avoid splitting the wood when nails must be placed near the ends of thin or narrow strips it is well to drill holes as for screws.

TO AVOID A DRY TIME

MAINTENANCE of normal humidity of the indoor atmosphere throughout the winter makes for greater absence of colds and throat trouble. It also prolongs the life of furniture and woodwork which otherwise pull apart as the result of excessive drying. Water containers, corrugated in shape to fit into the spaces between the radiator tubes, and hung in the rear of the radiator out of sight, provide an efficient means of evaporating water to moisten the air. In the case of hot air heaters make sure that the water container which is part of the heater is constantly kept full.

WHEN RADIATORS DON'T RADIATE

TO GET the full heating effect from a hot-water radiator, the interior must be free of air. When a radiator becomes air-bound through evaporation of some of the water in the heating system, parts of the radiator sections are filled with air, which remains until allowed to pass out through the air valve. Air pockets forming from time to time inside water radiators, especially in the topmost rooms, cut down their heating power in proportion as they rob the interior of the castings of proper contact with the heated water. They also prevent circulation of the water and filling the radiator with water. When a radiator does not heat as well as usual, opening the air valve until the water flows is the remedy. Doing this occasionally will avoid any possibility of inadequate heating from this cause. As air is removed from the system water must be introduced to maintain proper automatic control of the drafts.

FIRE WISDOM

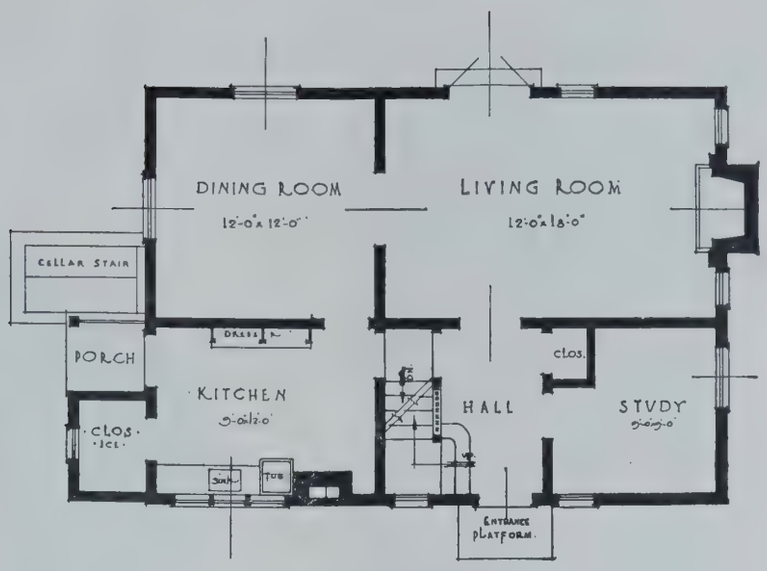
ONE of the most common troubles in maintaining a live fire in any type of heater is due to improper morning firing. The mistake made is to shake the grates violently and then add a large quantity of fuel. The proper method is first to open the drafts to liven the fire. There should be a good charge of unburned coal left from the previous night's firing. If not, use a larger proportion of pea or buckwheat coal for banking the fire at night, allowing the drafts to remain on just long enough to start combustion, then check them. If the fire is quite low in the morning, add a small amount of fuel without entirely covering all of the live coals. When the fire is burning briskly, shake the grates and fill the firepot. Do not check the drafts until blue flame shows. The drafts which should be open when firing at any time are the ash-pit and smoke-pipe dampers. The check damper which admits outside air into the smoke pipe should be closed when firing.

A House That Was Built for $9,000

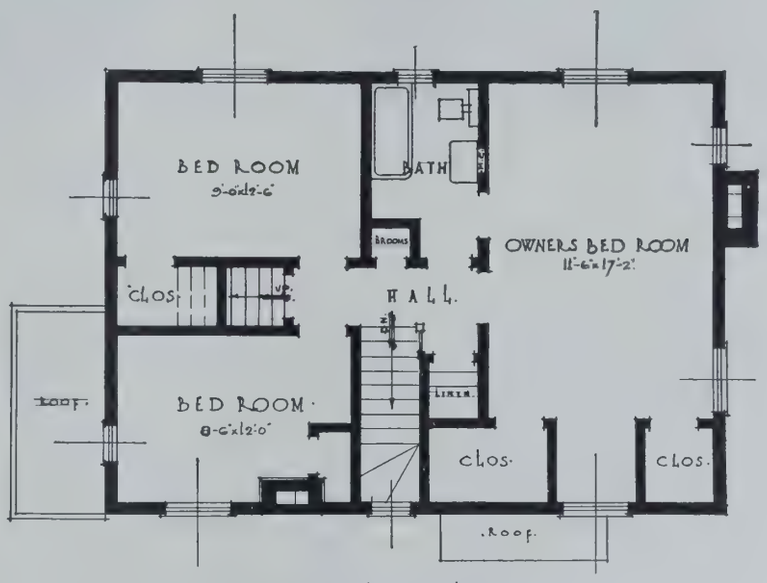
At Ridgefield, Conn.

POLHEMUS & COFFIN, Architects

Photographs by Kenneth Clark.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

THIS charming little house triumphantly demonstrates that the moderate priced dwelling can also be pleasing in its general design and exterior appearance. It has individuality and character largely achieved by those touches of personality which lift it out of the rut of the commonplace. Its interior is well designed for service. Taking advantage of out of town conditions this house was completed in stucco for $9,000.

When Italy Goes to the Golden West

S. STILLMAN BERRY

Charming Treatment of an Odd Corner Plot 130 x 150 ft. and Development of a Garden in Blue in Harmony with the Color Scheme of the House

Photographs by W. N. Kline, Jr., G. B. Montgomery, and the author

The dominant color tone—blue—is emphasized in the tile insets of the fountain wall and by the surrounding garden urns in the same tone. A giant tree Bamboo, the close-clinging Ficus repens and dainty flower beds of Forget-me-nots, Daffodils, and Baby Primroses, all find their place in the composition

PROBLEMS of the simplest premises are often among the most baffling. This holds in so empirical a field as garden design not a whit less than in pure mathematics. And it is a practical truth in many other branches of human effort. A genuine landscaping of the small garden is one of the rarest feats in the whole horticultural calendar, and when necessity demands that the area treated be little more than a simple square, the problem becomes doubly difficult of entirely pleasing solution.

Another rarely mastered difficulty is to so construct a semi-formal garden, say of Italian type, that while yielding its full meed of pictorial charm, it still retains something of the domestic intimacy and coziness which manifold experience has ever compelled us to associate more closely with compositions of our ancestral English tradition and motif.

The accompanying garden scenes, taken around and about the home of Mr. George B. Montgomery in Redlands, California, show how well and happily, not one of these problems alone, but both of them simultaneously have been met and surmounted in a particula instance.

To begin with there were the followin considerations which the designer, Mr. W. E Rabbeth of Redlands, had to hold in min and contrive in some way either to overcom or utilize in his scheme as his developing pla might determine. Firstly, a simple plot (ground, 130 by 150 feet, perfectly rectangula as to boundary except for one rear corne lopped off in toto. Secondly, a strong slop

A clever use of Per winkle clad banks an hedgings of Californ Privet and Englis Laurel soften the a cent to the upper lev and, with the aid Italian Cypresse break the severity architectural lin Flower beds of pin Stocks, Baby Prim roses, and Forget-m nots along the wal East wing of the hou and the garage see from the garden

toward a storm drain serving to delimit the tract on the east. Thirdly, the setting, a row of large Olive trees along the street, some towering groups of Eucalyptus on the neighboring properties to the rear, an immense Weeping Willow on the adjacent corner of the estate to the east—the whole embowered in orange groves. The Oranges and Olives at once united somewhat forcefully to suggest an Italian design and this was frankly accepted, the same severe style also making possible the economy of much needed space.

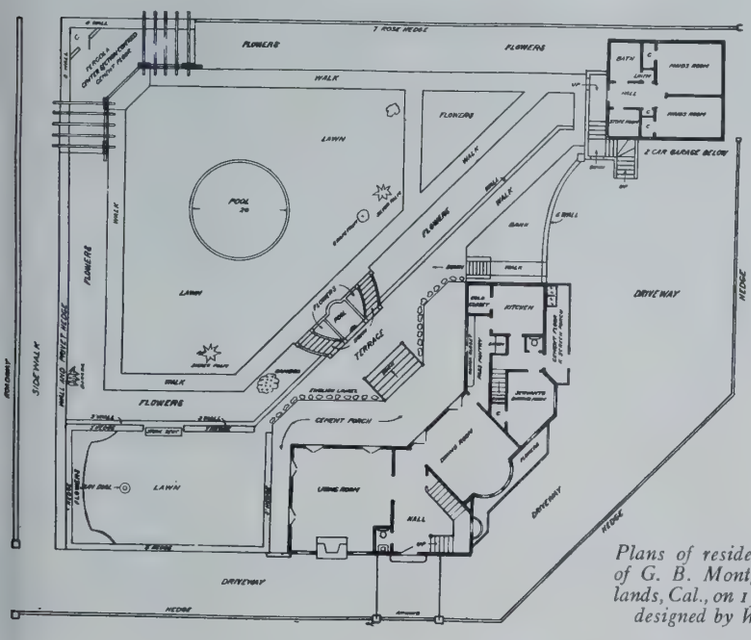
The appended diagram indicates how the house and drive were thereupon built upon the higher level of ground, the house being set well back and fitted into the lopped corner of the lot with only the drive running around it to the rear. The garage and servants' quarters to the eastward are connected with the house by a high garden wall, effectually dividing and screening all the rear quarters from the comparatively large front area thus left wholly available for purposes of garden and ornament. The major part of this originally sloping front tract having been brought to one level by excavation, various sloping beds, bits of lawn, hedgerows, paths, and judiciously placed retaining walls serve to ease the ascent toward house and drive, as well as vastly to soften the essential severity of the architectural lines. The telling use of different successions of hedgings to this general end is particularly pleasing.

English Laurel trimmed quite high has chiefly been chosen for use against the house, but in such a way that the vista of the garden from house and terrace is in no serious degree impaired. A squarely trimmed hedge of

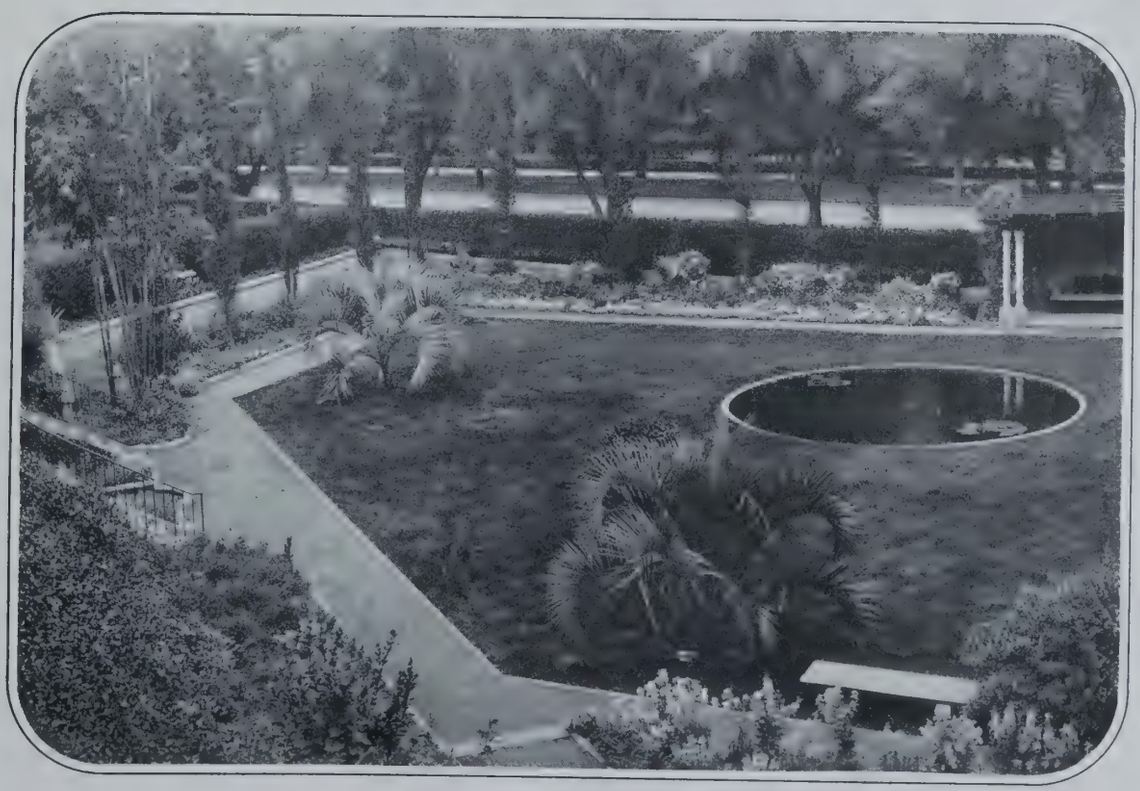
Wistaria clambers at will over this garden gate. The delicate trellis vine in Muhlenbeckia

California Privet surrounds the little sloping lawn with its enclaved sun-dial which surmounts the west wall of the garden and separates the latter from the entrance way. Further privacy is assured by a similar hedge along the street walk, so that although pedestrians are granted sundry charming glimpses as they stroll by, they little obtrude upon the pleasant retirement of the precincts within.

The house is surfaced with a grayish white cement, with trimmings, hangings, and awnings of Venetian and slate blue. This blue note, carried into the out-buildings and garden, becomes the leading motif in the



Plans of residence and garden of G. B. Montgomery at Redlands, Cal., on 130 x 150 ft. Both designed by W. E. Rabbeth



Looking into the garden from the balcony of the garage, showing the avenue and the long front lower beds made gay with Marguerites, Cornflowers, Alkanet, Felicia coelestis, Sweet Alyssums and Verbenas. Butia palms in the lawn, and Pansies along the top of the wall in the left background

The walk along the street at the rear of the loggia, showing Privet hedges and a carpeting of Periwinkle beneath the Olive trees

congeries of lovely little pictures which the system of hedges serves to frame. Quite often when a strongly emphatic color note is adopted to bind architecture to some feature of its surroundings, as it has been much the fad to do of late years especially in California, the result is but a garish scar on the landscape quite as insolent in its utter inappropriateness as one of our highway signboards. Here such ill fruition of the designer's hopes has decidedly not come to pass, and it instead constitutes one of the very few really successful illustrations of the principle that I have seen. Care in avoiding all suspicion of dissonance, and everywhere in utilizing the blue motif with the most careful regard for its pictorial quality, have produced a thoroughly captivating result.

The ample tea-house, part in loggia and part in pergola design, which occupies that corner of the garden diametrically opposed to the house, with the hanging curtains of the great Weeping Willow already mentioned as a background, is largely furnished in blue. Water, both placid and in motion, is likewise used in the garden. The two broad flights of steps which lead from the garden up to the level of the house flank either side of a well-designed wall-fountain. The blue motif is prominent here, as again in the quiet pool which, rimmed in Venetian Blue and with blue Water-lilies floating above a brilliant fauna of Japanese goldfish, lies near the center of the garden.

The space surrounding the pool is planted to lawn, broken merely by a few isolated Palms and shrubs. The sward is uncut by paths, which, instead, circumvent it, paralleling the flower beds, the latter being laid in on every hand along the bounding walls and hedges. Blue flowers heavily predominate in these beds—Forget-me-nots, Corn-flowers, Verbenas, Alkanet, Violas—but this does not preclude abundant use of other hues, particularly pink and yellow, with the white of Alyssum, Candytuft, and Marguerites as a foil. Tall Snapdragons and Stocks are frequently used in masses in the sunnier beds, with various Primulas and Freesias in the shadier corners and Daffodils near the fountain. The wide space beneath the Olive trees along the street is carpeted with Periwinkle, thus carrying the blue motif further afield in an appropriate and picturesque way.

The adopted arrangement throughout tends to the formal sufficiently to preserve to the full the sought-for Italian picturesqueness, spaciousness, and dignity, but both the general composition and the handling of details are sufficiently free that a homelike coziness and livableness remain after all a principal keynote of the whole.

A cheerful planting of Climbing Cecile Brunner and White Cherokee Roses, Marguerites, Snapdragons of varied hues, pink Stocks, and Sweet Alyssum, at one end of the inviting pergola. Weeping Willow makes an effective background, a most pleasing use of this often difficult tree

In this living room where comfort seems to have found an abiding place, the soft tones of the woodwork and the gayety of the chintz find harmonious colorings in the Chinese rug on the floor that make of the room a completed picture. In this rug the floral and naturalistic forms so characteristic of the Chinese artisans may be seen in the delicate tracery of this design

RUGS THAT MAKE A RESTFUL ROOM

I—The Beginnings of Rug Making

AMY RICHARDS COLTON
Interior Decorator

Oriental Significance of the Rug in the Earliest Days, and the Part It Played in the Life of the People

THE weaving and use of rugs is as old as recorded time. Like many of our household arts, its beginning was in the Oriental countries and unlike many of them its continuance has chiefly remained there.

We are beginning to use the words "rug" and "carpet" more or less interchangeably, but to most of us formerly the word "carpet" signified a machine-made floor covering, woven by the yard, which when sewn together in strips would cover an entire floor and was then tacked down. The word "rug," on the other hand, suggested a plain or patterned floor covering woven by hand or machinery in various sizes, complete in itself and sufficiently heavy not to be tacked down.

Nearly all of us can recall the magic carpet of the old fairy tales, which carried whoever was fortunate enough to possess it wherever he or she wished, in the twinkling of an eye. Though this story usually came to us through European folk lore, its origin was oriental. There is even a legend that King Solomon was whisked to Mecca and back through space on a magic green carpet.

These legends of a carpet as a magic conveyance had back of them all the meaning that the Oriental had woven into his carpet since time immemorial. It signified the foundation of his home, and in its various forms accompanied all the ceremonies of his life. It was woven by hand, according to the religion and particular traditions of the tribe and into it went not only these accumulated traditions, in the matter of religion, design, color, and material, but the individual fancies of the weaver. Even the poorest wandering tribesman, when he pitched his tent at night, also spread his carpet. It embodied home, religion, warmth, custom and hospitality. No wonder it was symbolized in the fairy tale as having magic qualities.

As in many branches of art, the earliest reference to woven hangings and rugs are from Egyptian sources and, following these, one hears of them next through those of Assyria and Chaldea. No actual carpets of those early times have survived, but there are records of them in the bas-reliefs at Nineveh.

There are evidences of still earlier weavings

on the North American continent in Yucatan, and enthusiastic archæologists of this region believe that many of the designs of the early Asiatic weaving came to them from the American continent. All this is conjecture and theory, but the fact remains that many of the same early motifs in carpet weaving have been discovered to have existed simultaneously in far-distant parts of the earth in the remote semi-legendary past.

There are references to woven floor coverings throughout the Bible, Homer and Herodotus, in fact, wherever the everyday life of people is described in the earliest records of Oriental and southern European countries. With the exception of some of the cruder weavings of half-civilized or peasant peoples, the tapestry rug weaving of Europe, and a few European offshoots of true Oriental rug weaving—the history of this industry is chiefly concerned with the Oriental countries from Egyptian times to our own.

ROUGHLY speaking, Oriental rugs are divided into a few big classes: Turkish, Persian, Caucasian, Turkoman, Indian, and Chinese. These large classes are subdivided into innumerable smaller ones, that are usually named for the local districts the rugs are woven in, or from the name of the tribe that weaves them. Commercially speaking, there is much confusion about the names of special varieties of rugs, as dealers had no conscience about inventing names, either entirely fanciful ones or taken from some city or district they are sold from, instead of the one they are woven in.

The greatest confusion arises, as there is often a correctly named class of rugs, well recognized in their own locality, which are eventually sold into the western world under a fictitious name, whereas some other less choice rugs have been sent forth masquerading under the name of the finer rugs. This situation arises so often that it is frequently easier

An antique Chinese rug in softest tones of salmon, yellow, and blue showing the Chien Lung realistic floral design

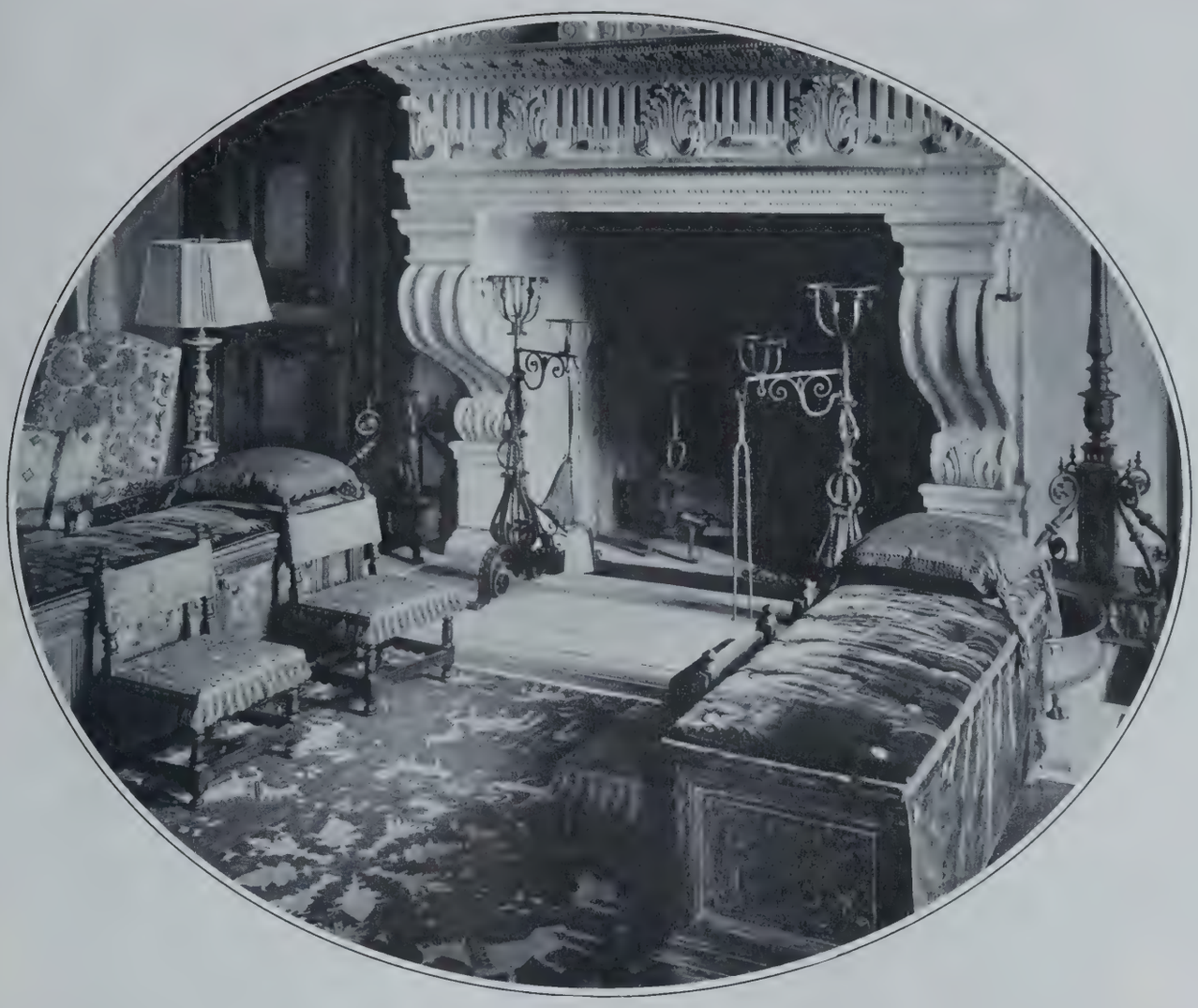
to let the trade names have their way than to try to disentangle them.

The materials used in weaving Oriental rugs are wool, camel's and goat's hair, cotton, silk, and hemp, but the most important of them all is wool. It is obvious from this that a grazing country, where sheep and goats can be herded, is the natural one for rug weaving, and throughout central Asia from Constantinople to China rugs have been woven by both wandering and settled peoples since the beginning of time.

The more primitive and distinctive rugs are woven in the open or in peasant houses on the rudest looms, which have not changed in hundreds of years. The weaving is usually done by children under twelve or by young girls. Among the ruder peoples, girls gen-

In this room done in the Italian manner the two Gorevan rugs of north Persia give a warmth of color that softens what would otherwise be too great austerity and coldness

This Kuba rug (so frequently miscalled "Armenian") affords an example of the beauty achieved where the Turkish or Ghiordez knot is used in weaving. Since the conservatism of Islamism forbids the use of any human or animal forms the rug makers must fall back on geometric patterns producing a harmony of design that is both pleasing and restful



With the Moorish conquest of Spain, Oriental rugs and weaving were introduced. While using the rich and brilliant colors of the East, the Spanish weavers gave a native touch to their designs and in this antique Spanish rug may be noted the white horses with their typically Spanish collars and bells

erally weave an especially fine rug as their dower, and the sort of husband they get often depends on the splendor of the rug, which he receives from the girl's father along with the girl! Western demand for Oriental rugs has caused to grow up in the larger towns and cities rug weaving industries on the scale of primitive factories, where the individual taste and creative gift of the weaver are lost, and the tendency is to standardize the rugs to suit the demand of the western world.

ORIENTAL rugs are composed of three parts: the warp (of cotton, wool, or rarely hemp), the weft (usually of wool), and the pile (of wool, silk, camel's or goat's hair, or rarely cotton). In spite of the enormous variety of rugs woven, the only variations in the methods of weaving are the Turkish or Ghiordez knot and the Persian or Sehna knot, in tying the pile for rugs with a pile surface, the weft threads thrown across keeping the pile firmly in place. Beside the rugs with pile there are the Khilims, which are double-faced, with a smooth surface like tapestry. The Soumaks or so-called "Cashmeres" are smooth also on the right side but shaggy on the wrong side. The Turkish knot is employed chiefly in Asia Minor and the Caucasus, the Sehna knot in Persia, India, and the Turkoman regions. These knots are as old as the history of rug weaving and are often deftly tied by children under twelve.

The dyeing of the materials used in rug weaving was formerly done by families of dyers who handed their secrets down from father to son. The dyes were largely vegetable, fixed by mordants, and each dyer had his own secrets. All the fine old rugs were woven from materials dyed this way and the colors obtained were infinitely varied, beautiful, and permanent. Then came the earlier chemical, so-called aniline dyes, which were originally fugitive and garish. They were so cheap and time-saving that the temptation to use them was great, and the art of rug weaving suffered accordingly. There is no reason, however, as the developments and improvements of dyes have gone on, why, inherently, these dyes should not be as permanent as the traditional vegetable ones, or fail to give as great a variety of true and beautiful colors. The only obstacles are the lack of knowledge of the use of the best of the chemical dyes and the cost of them. The original aniline dyes gave all chemical dyes such a bad name that the public at large still believes that no good results can come from the use of them.

FROM the Oriental's point of view all rugs were designed and woven for definite purposes and the shapes, sizes, colors, and designs were planned accordingly. The principal kinds were: prayer rugs (small and slightly oblong, with a pointed arch at one end); hearth rugs; long runners for the sides and center of a room; wider rugs to lay at the principal end of a room, where the master of the house reclined; firmly woven small rugs for pillow covers, and long ones to cover the felt divans; saddle bags of gay colors and fantastic designs; bath rugs; wedding or dowry rugs; grave carpets; with special designs, that were laid on the graves as a last tribute, as we lay wreaths of flowers. In this connection weeping willows and cypress were used for designs and the familiar weeping willow of the New England gravestone is the lineal descendant of these ancient Persian grave carpets. Lastly there were fine silk weavings for wall hangings, used in the place of pictures and in the Persian ones, the hunting or garden scenes were often woven.

In general, one may say that the designs of Turkish, Caucasian, Tartarian, and Turkoman rugs are geometrical in their tendency, and those of Persia, India, and China tend to floral and naturalistic forms, with greater curves

In the conservative Mohammedan countries the rules of the church forbid the use of human, animal, or bird forms and the designs are entirely conventional; but the Persians, and through them the Indians, were less strict, hence the free use of flower, animal, human, and bird forms in their weaving.

As the caravan routes from China led through Persia, many Chinese forms were introduced: deer, leopards, dragons, unicorns, and other mythological creatures, each having its own significance. All designs were fraught with symbolism and even the colors carried their meaning.

ORIENTAL carpets were first brought into Europe through Greece and Rome and later the Moorish Conquest of Spain introduced them there. Looms were started in Sicily, Cordova, and later in Venice, which wrought true Oriental carpets, though each region contributed a native touch that gives a peculiar interest to any pieces that have survived from those early days, in fact or tradition.

The returning crusaders brought back into northern Europe tales of the eastern carpets, and trade being established between the Orient and Europe, via Venice, the richer nobles and royal personages acquired these treasures and enriched their palaces and castles with them. In very early times weaving was introduced into Scandinavia from the Orient and the skill that was acquired then has persisted to this day, which accounts for much of the delightful folk-weaving in Norway and Sweden. The flat Khilim stitch before referred to was the prototype of the tapestry weaving of the middle ages and later on of the Aubusson and Gobelin carpets of France.

In England Oriental weaving was introduced at Mortlake and those looms were famous for a long time.

In addition to the weaving of rugs with a pile and those with the Khilim or tapestry stitch, there have always been more primitive forms of weaving among semi-civilized peoples and peasants, that are full of beauty of pattern and color if rough in texture. The Navajo Indian blankets, various forms of rush mats, our own hooked and braided rugs, the peasant rugs of Spain with the knotted patterns, all come under this head, and are as delightful in their way as the cruder Oriental rugs of the nomadic tribes.

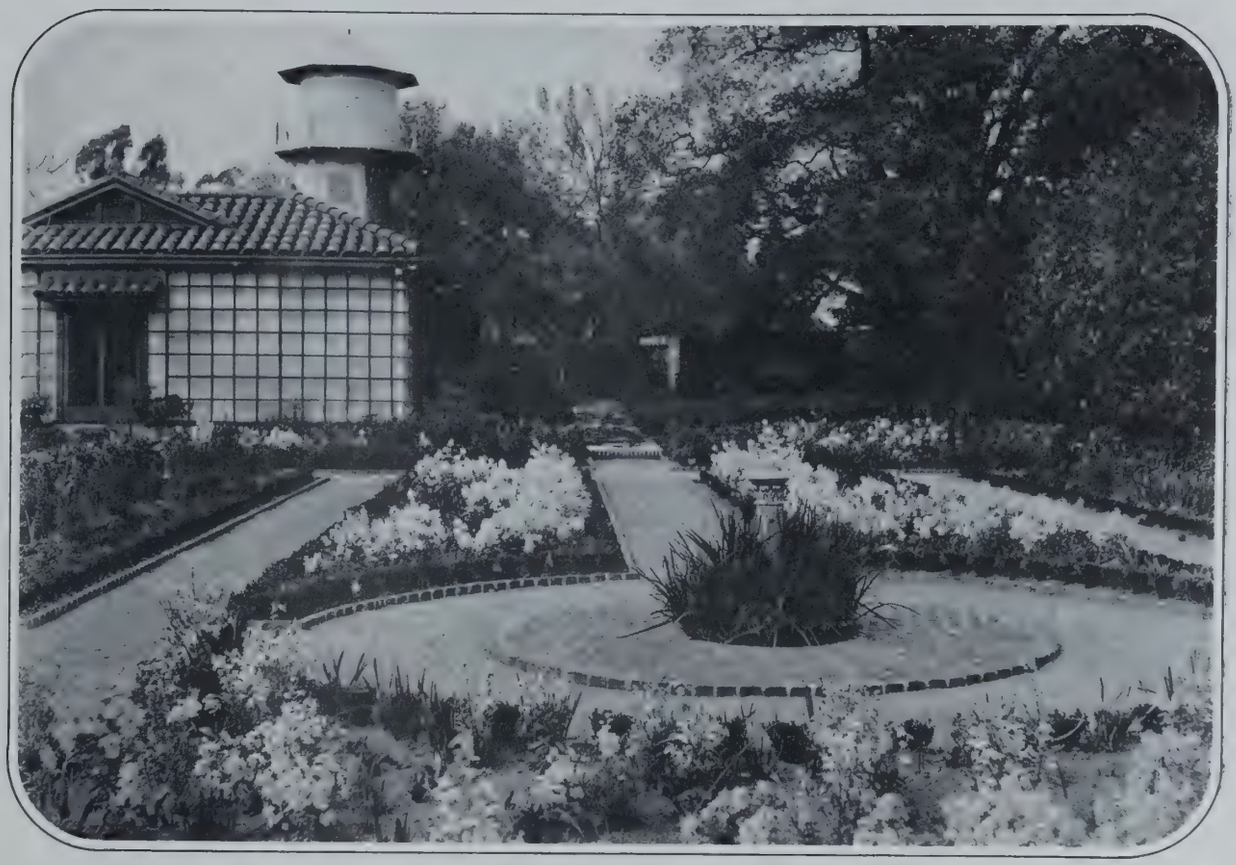
It is all too big and thrilling a subject to compress into the narrow limits of a magazine article, but it may at least be stimulating to those who have only thought of rugs and carpets as mere floor coverings to be purchased by the square foot or yard, to realize the deep feeling for color, design, and religion that has gone into the weaving of the rugs of these early weavers, the heirs of whose thoughts, simple faith, and labor we have all become.

America was not without its own art of rug weaving, and the beauty of the hooked rugs of New England makes them as decorative as many of their richer sisters. In a hall such as this, with its distinctive Colonial flavor, such rugs are more appropriate than those from the Orient or far Cathay

National Garden Week for 1925 to be observed April 19th—25th

Gardens About Two Pasadena Homes

Designed by FLORENCE YOCH, Landscape Architect



A glimpse of the garden of Mrs. C. B. Boothe, South Pasadena, Cal. Here winter flowers—Stocks, Snaps and Pansies bloom gaily in March, just about eight weeks after the garden was completed, and flowering bulbs contribute further beauty. The path of flagging, from the garden, leads to a generous sweep of lawn where shadows play beneath the gigantic oak which has a spread of about seventy-five feet. (Quercus lobata the variety of evergreen oak indigenous to Pasadena and vicinity)

Mr. R. R. Goodell's home, Oak Knoll at Pasadena, Cal. The Rolling contour of the land in and around Oak Knoll affords many opportunities for interesting changes of level in garden and grounds. Here, the California Live Oak (Quercus agrifolia) flourishes in all its magnificence with orange trees to add further charm to the garden. A low hedge of Myrtus communis is used for bordering and a hedge of Laurustinus makes a pleasing background for flowers, while the low spilling Cotoneaster microphylla with its rose-hued berries adds its enlivening bit of color to the scene

F. W. Martin, Photo.

PERFECTION IN THE LITTLE HOUSE

LIGHTING FIXTURES

Part I—Indoor Equipment of Character

PHIL M. RILEY

Photographs by Mattie Edwards Hewitt, F. Nafz, Graham Photo Co., F. W. Martin; also by courtesy of The Beardslee Chandelier. Mfg Co., Arthur Todhunter

This is the third article of this very practical series by Mr. Riley on household appointments. The first appeared in the September issue under the title of "Equipping the Kitchen for Easy Housekeeping." The November number contained the second of the series—"Planning and Equipping the Bathroom"

FROM one-fifth to one-third of one's waking hours, according to the season of the year, are spent by artificial light. Therefore lighting and lighting fixtures assume a real importance in the equipment scheme of the modern home. Now, while the primary function of lighting fixtures must ever be utilitarian, they also offer great decorative possibilities and have very properly become ornamental as well as useful, and that ornamentation is best which graces articles and appliances of utility. The interior decorator of to-day devotes as much thought to the selection of appropriate lighting fixtures as to wall and floor coverings, draperies and furniture.

Electricity has become practically the universal artificial light of the present century. Among its greatest advantages are adaptability and portability. One can have wherever it is wanted the light best suited to any particular purpose, momentarily or for any duration of time. This comfort and convenience, the consequent reduction of eye strain and the ease with which lights can be turned on and off at will has greatly increased the lighting equipment of the average home without any material increase in the monthly bills for current consumption.

IN SELECTING the lighting fixtures for a home, first consideration must be given to their adequacy as sources of the sort of illumination desired, second to their ornamental value in an appropriate scheme of interior decoration. What then are the essential fixtures? To answer this question it is necessary to review the uses of each room, keeping in mind the fact that there are two general classes of fixtures: permanent ceiling and wall lights for general illumination and portable floor and table lamps for particular uses.

Time was when good general illumination of a room was considered sufficient; but the ease with which electric light may be brought directly to the reading, writing, sewing, or other occupation in hand makes portable shaded lamps of various sorts largely depended on. Not only does this reduce eye strain but it lends delightful touches of soft color here and there, producing an atmosphere of cosy intimacy. Such portable lamps are made possible by plugging into convenience outlets located in the baseboards or the wall three or four feet above the floor. They may be had single or double so that two different lights or appliances may be attached to one outlet, and there can hardly be too many of them. Every room should have at least two, as they will be needed for plugging in vacuum cleaners and other electrical appliances as well as lamps.

Branch plugs from which two or three circuits may be taken multiply the usefulness of each outlet provided the wiring and fuses are adequate. But the better scheme, avoiding overmuch cord lying about the floors, is to furnish the rooms on paper when the house is built and plan the lighting scheme accordingly so that the wiring will provide the desired permanent fixtures and convenience outlets properly located.

Mattie E. Hewitt, Photo.

Exquisite in design, yet suggesting both use and durability these lighting fixtures have been frankly used as part of the furnishing of the hall, aiding materially in breaking up blank spaces.

IT IS at the doorway and in the reception hall that a guest receives his first impressions of a home, so that adequate and attractive lighting in these places is particularly important. Porches and vestibules are lighted

ither by ceiling or bracket fixtures controlled om wall switches in the reception hall. racket fixtures in the form of lanterns or orches may be used with good effect on the all at each side of the front doorway. The ll-enclosing type of glass shade is best for eiling lights outdoors. The outdoor fixtures hosen should be in keeping with the archi- ectural style of the house and should be elected with regard to permanency, as they ill be more or less exposed to the weather. ach outside and ceiling fixture requires a o-watt bulb for good lighting.

In the reception hall an appropriate ceiling xture is usually depended on for general lumination, bulbs totaling 50 to 100 watts eing well shaded to soften the light, prefer- bly in an all-enclosing bowl. Where a light to be located over the stairway newel a ntern hung on a pendant chain is effective. ecorative bracket fixtures here and there n the walls and a portable lamp on the hall ble add much to the appearance of large ception halls when properly shaded 25 or o-watt frosted round bulbs are used. Candle xtures with figured curved shields or round ades are suitable, also fixtures with glass ades open at the top and recalling early oil mps of former days.

For upstairs halls, ceiling lights are usually est, although bracket fixtures are frequently uite satisfactory. As some of these hall xtures will be depended on to light the stair- ays, they should be located with that in mind d be wired for control both upstairs and ownstairs. Turns and stairway landings rt way up often call for a small ceiling or all fixture with a 25-watt shaded bulb. In e average home a total of 50 to 150 watts is eeded to insure good lighting of halls and airways.

N THE living room, lighting fixtures must not only furnish general and particular umination for reading, writing, sewing, play- g games, etc., but for decoration to make the om look cheerful and attractive. For gen- al illumination a ceiling fixture controlled a wall switch is needed, and if the room is enty or more feet in length, two fixtures insure adequate diffusion at the ends of the om. Clusters of four six shaded bulbs taling 150 to 250 atts are preferable, e amount of drop om the ceiling de- nding on the height the room. Seven et above the floor as low as they should me. Glass shades en at the bottom e best, but should deep enough to hide the incandescent ament completely. Bulbs entirely frosted, at least frosted on the ends, are best for st uses.

Several bracket fixtures with single or twin ns for 25-watt round frosted bulbs located available wall spaces and controlled either as a unit by a wall switch or singly, furnish touches of cheerful color more for ornament than usefulness, although occasionally handy over or beside bookcases or other cabinets. Candles with glass, parchment, or silk shields may be chosen, or fixtures for glass shades open either at top or bottom as preferred. Shaded auxiliary candle lamps have decorative value at each end of the fireplace mantel.

Wall lights are essential to the proper lighting of a room. In these days of carefully designed lighting fixtures even the simplest of these lights may be made to play an important part in lending charm and a homelike quality

For reading, writing, sewing, and like purposes auxiliary portable floor and table lamps should be used, each with bulbs totaling 50 to 100 watts. Placed where needed, they usually give enough cheerfully intimate light for ordinary purposes, except on special occasions when more general illumination from the ceiling fixtures may be desired. Every table needs its lamp; every big easy chair its floor lamp; and the piano also. Convenience outlets in floor and walls must be located accordingly. In most rooms approximately one outlet will be needed for every fifty square feet of floor space. Where a sofa or davenport stands before a fireplace, floor or end table lamps at each end are attractive and useful. If a long davenport table is placed back of the davenport, one or two table lamps may be used on it. All table and floor lamps should have wide shades, preferably of parchment or silk which throw most of the light downward. Shades partly open at the top and contributing something to general illumination by reflection from the ceiling are preferable. Otherwise a room seems dingy or too full of contrasts. Frosted bulbs should be used with silk shades unless they are lined.

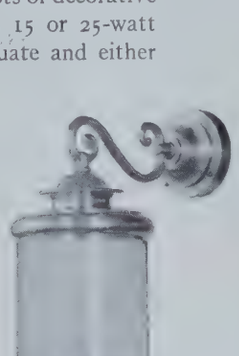
Portable shaded lamps are now largely depended on to bring delightful touches of color here and there in a room while the glow of softly glazed globes in wall and ceiling lights prevents glare and eye strain and makes for harmony

AMPLE lighting makes for good eyesight and health, but glare is as detrimental to both as gloom. If the bright spot of the filament can be seen through or below the shade, then the shape, texture, or color of the shade material, whatever it may be, is not right. Well lighted living rooms will aggregate 250 to 500 watts according to size.

Library lighting is practically the same as that of the living room, and the same is true

of the sun porch, except that lighter and more colorful decorative fixtures are permissible. An attempt should be made to make the sun porch on occasion as bright and cheerful at night as by day, and a total of 175 to 350 watts will not be too much with which to do it, remembering that as in the living room the idea is not necessarily to use all at once, but each as needed.

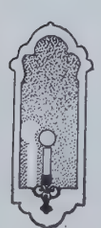
In the dining room the dining table is all-important and it is customary to flood it with a soft light of 100 to 200 watts from a ceiling fixture so shaded that the filament sources cannot be seen as one sits at the table. A low pendant type of fixture is excellent, either with an inverted bowl shade and frosted bulbs, or with a cluster of individual shades open at the bottom. The candelabra type with four or six frosted bulb candles and individual candle shades is also much favored, as it harmonizes nicely with the twin-candle wall brackets and candle fixtures on sideboard and buffet which furnish supplementary light when needed and charming spots of decorative color. For the wall brackets 15 or 25-watt round frosted bulbs are adequate and either round shades or curved shields may be used as desired. A total of 200 to 400 watts will be needed in the dining room.



The efforts of craftsmen and artists now combine to give so wide a selection of correct lighting fixtures that no matter what the color scheme or especial needs of the room may be the exact fixture to produce an harmonious effect may be procured

THE kitchen is the workshop of the home and calls for as good lighting as any other room. For general illumination a bulb of about 100 watts in a dense milk-white all-enclosing glass fixture on the ceiling should be provided. This may be controlled by a wall switch or pull chain. A flattened shape of enclosing shade will diffuse the light more evenly about the room. A similar but smaller fixture is suitable for the pantry. In order that the maid or housewife need never cast a shadow on her work, one or more supplementary bracket fixtures for shaded frosted bulbs are convenient for temporary lighting. Places where these are useful are beside the sink, gas range and kitchen cabinet, two when located side by side being well lighted by one wall bracket. If there is a breakfast nook a ceiling fixture of 50 to 100 watts capacity which directs most of the light downward is desirable, as the nook may be used at other times than by daylight. A total of 150 to 250 watts is not too much for kitchen lighting.

For general illumination in bathrooms, a ceiling fixture much like that in the kitchen is desirable with a 50-watt bulb controlled by a wall switch. At each side of the mirror at eye level there should be a wall bracket with a 25 or 50-watt bulb. Long, dense, milk-white glass shades open at the top will diffuse the light, soften the shadows and light both sides of the face. Allow 100 to 150 watts for each bathroom.



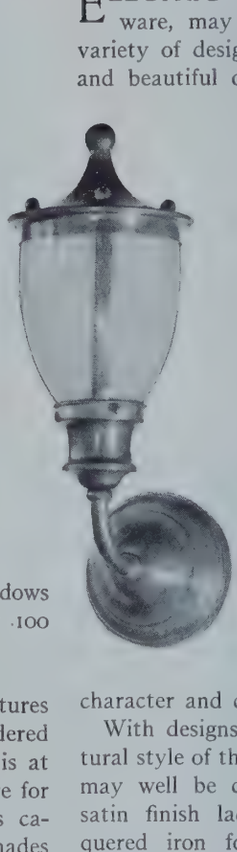
IN THE average bedroom bracket fixtures and portable lamps are usually considered sufficient, although in a large room it is at times convenient to have a ceiling fixture for general illumination of 50 to 100-watts capacity controlled by a wall switch. Shades should be such that anybody lying in bed cannot see the lighted filaments of the bulbs. As in the bathroom, it is desirable to have single bracket fixtures on the wall at each side of and close to the mirror of the dresser, dressing table and chiffonier. Glass shaded type fixtures with the shades open at top or bottom as desired are perhaps preferable, although candle type fixtures are sometimes used, especially for wall brackets.

A small portable boudoir lamp with a 50-watt bulb well shaded for reading and night use should be placed within easy reach on a small table near the head of the bed or between twin beds. A double convenience outlet should be installed where this is to be plugged in as numerous different electrical appliances may be needed here, especially in case of illness. Some prefer the attractive little lamps which are readily attached to the headboard of the bed. If the room is large a por table floor lamp beside a comfortable chai will be appreciated for reading or in case o illness. Ordinary bedrooms require a total o 100 to 175 watts, but the master's bedroon usually needs 175 to 300 watts.

Minimum equipment for servants' bedroom includes a 50-watt ceiling fixture, a 25 o 50-watt bracket fixture and a portable tabl lamp if the size of the room permits.

Laundry, basement, and attic lighting i purely utilitarian along the general lines o kitchen lighting and need not be gone int in detail here. The convenience of closet of all kinds throughout the house is increase by a single bulb ceiling fixture controlled b a pull chain.

ELECTRIC lighting fixtures, like hard ware, may now be had in an infinit variety of designs and finishes; designs new and beautiful or delightfully reminiscent o the lighting equipment o bygone days. Whatever the architectural style o the house or the scheme of interior decoration th lines of the leading manufacturers of lighting equipment afford a considerable choice of correct fixtures which wil harmonize perfectly and at prices to suit every purse. These firms maintain a free advisory service to assist in making proper and economical selections so that the prospective purchaser can take advantage of expert taste and judgment, thus insuring character and charm in the fixtures chosen



With designs in accord with the architectural style of the house, silver or bronze finish may well be chosen for downstairs rooms satin finish lacquered brass or bright lacquered iron for upstairs and sun rooms Portable table lamps may be had with a great variety of pottery, wood and lacquered metal bases. Floor lamps usually have either natural wood or lacquered metal standards the latter well suited to sun rooms. Shades are seemingly without end as regards material shape, color and decoration. Glass and parchment shades and shields generally speaking are perhaps better suited to downstairs rooms daintier glass and silk shades for upstairs rooms. The hand-painted glass shades now obtainable are especially beautiful. There is as much opportunity for the display of good taste in their selection as in any other decorative features of the home and they should ever be considered as objects of art as well as of utility.

Lighting the House for Outdoor Convenience

DOROTHEA DEMERITTE DUNLEA

A practical reflector for rear court or driveway

HOW positively lights bespeak welcome and cheer, at night, shining by the entrance gate or the front door of a home! Besides the hospitable and "homey" air they give a house, they serve so well to light the walk, the steps, to show the number on the house, the bell, the very keyhole and the latchstring, if it be out!

Indeed the modern house is featuring exterior lighting fixtures to a marked degree and with marked success. Isn't the Spanish home, for example, made far more pleasingly Old World in atmosphere with quaint wrought-iron lamps as an exterior decoration? They may be bracket fixtures placed on each side of the vestibuled entrance, or perhaps they are spaced at intervals along the front wall of the house, to light it from corner to corner, and thus emphasize the width and generous proportions of the "casa."

LANTERNS, swinging in bronzed frames, or trimmed with heavy black mountings may be chosen for the Colonial home, most appropriately, or for the structure of English design. The spacious Italian villa or the wee peasant cottage may still vote for other lighting decorations such as pedestal lamps in verde finish, of fantastic and curious patterning. And these floor lamps may be placed along the terrace or by the recessed portal of the home. Never were there more varied styles and types of lighting fixtures than now, and happily a style for every type of architecture.

But what the needs of exterior lighting are must first be considered. There is the front walk and perhaps a gateway to be lighted, the front porch and entrance to light. At the side of the house there may be a porte cochère or pergola over the driveway, and that will also have need of light as well as the driveway back to the rear yard and the garage itself. Verandas and porches on other sides of the house will be made much more enjoyable too, if lighting fixtures are amply provided. And the service yard will rightly earn its name if a light is placed on the house, to focus on the clothes yard, and light the walks to such buildings as the garage, the shed, and tool house.

The artistry of design in this lantern makes it an addition to the costliest or the simplest house

Here, the wrought-iron wall lantern adds quaint charm and a spirit of welcome

Reminiscent of another day and time, design and material are so successfully combined in this outdoor light as to make it a most decorative adjunct to any doorway

Choosing the fixtures for these many places will depend on the artistic effects desired and the utilitarian purpose of each light. Such places as the front walk and service yard at the rear will have need of strong bright light while perhaps the terrace or sun parlor will be most charming at night softly lighted with lamps that merely take away the "gloomy" black yet leave soft shadows to enhance the beauty of the surroundings of garden and lawn. The kind of light, the reflector and lamp will therefore be a consideration here. There

are ceiling, pendant, bracket and floor lights from which to choose. In reflectors, there are shallow bowls to distribute light over broad areas, deep bowls to focus light directly, and other types of angle reflectors to illuminate for special purposes. These reflectors may also furnish direct, indirect, or semi-indirect light and the lamps, opal or frosted, for example, will have much to do with the luminous effect obtained.

The beauty and welcome and sense of neighborliness of a well lighted house are exemplified in this picture of the home of Dr. Philip G. Cole at Forest Hills, N. Y.

Photo. by S. H. Gottscho

FOR the home of simple design, a ceiling light is a good choice for the front porch, or a wall light that illuminates the entrance and the house number plainly. A lamp with the house number painted or fastened on it is a novelty that is also practical. For the side or driveway entrance, a ceiling light may again be chosen, for here it is sure to be up "out of the way" and yet in a place to give good service.

And for efficient service, it is well to plan for switches that are located to give the greatest convenience, according to individual needs. A controlling switch inside the front door is the usual plan but a switch on the exterior of the home is also a help. A switch by the driveway entrance, especially, is not to be overlooked for the light can then be turned on and off as one enters or leaves, without the need of keeping the light burning for a long period.

Convenience outlets are being installed in many new homes for use on porches and verandas, for besides lighting, one may like to use an electric fan on the porch, or, when entertaining, connect the electric grille or percolator. And if a number of outlets are installed, one can work out many pleasing effects for the outdoor living rooms with portable lamps—floor lamps of wicker, wood, or metal. Torches that flame against the darkness of a summer sky may give just the right illumination on the open terrace and the sun porch may have either wall lights or ceiling fixtures to light it at night. Semi-indirect fixtures are satisfactory for general illumination for such an outdoor living room and a hanging basket of foliage may cleverly conceal a cluster of lights, to harmonize with the surroundings of sun room or conservatory. Tinted globes are also a suggestion where one wishes an elaborate lighting effect.

FOR practical purposes, the driveway should be well lighted and one home recently seen, electrically up-to-date, had installed lights the entire length of the driveway from side entrance to garage, strung overhead as street lights. But a light at the entrance of the driveway and one at the garage usually is sufficient to give good illumination. Directly over the doors is a good place to install the garage light, for there it is of aid when opening or closing doors at night. Angle type reflectors are being used for this purpose, too, and to light the service yard. Where a brilliant and concentrated light is desired these angle type reflectors are to be remembered for they act much as a spot light, and are also very practical for outdoor use.

Fixtures, reflectors, and lamps for outdoors must of course be of sturdy construction to withstand the elements, the winds, rain, and sunshine of the varying seasons. And this item must be considered when selecting fixtures. Wire frames over the bulbs are a good protection for lights that are out in the open, in such places as the service yard, or by the kitchen or cellar entrance.

The cost of installation repays one in the convenience obtained each night in the year. Good illumination of doorways and entrances, of dark nooks and corners, is a safety factor, and an actual burglar insurance, too. So it seems that exterior lighting means much to the modern house, by reason of the service that is rendered, the protection that is given, and the beauty that is added to the appearance of the house.

HOMES IN THE NEW LAND OF ROSES

REV. SPENCER S. SULLIGER, D. D.,

Hon. Vice-President American Rose Society.

Photographs by Arthur M. Prentiss and Asahel Curtis

DUE to the equable, moist climate, with but very little rainfall during the blooming season, the Pacific Northwest has its wealth of green growth charmingly decorated with almost every kind of flower and shrub. Due to these favorable climatic conditions and a soil almost perfectly suited to the growth of Roses, the Coast section of the states of Oregon and Washington is a veritable garden of roses. Then, the absence of intense sun heat brings to unusual perfection of color the red and yellow Roses, while the almost uniformly mild winters reduces to a minimum the need of protection for even the Tea Roses. The writer has not given any protection to his Roses, save a hilling up of soil during a few cold snaps, for a number of years.

The illustrations in this number of the GARDEN MAGAZINE & HOME BUILDER are from the three great Rose centers of that section of Oregon and Washington lying west of the Cascade Mountains: Portland, Oregon, and Tacoma (page 224) and Seattle, Washington. Each of these cities have soil, climate, and qualified rose and flower enthusiasts as well as progressive rose and flower organizations. The same is true of many other cities and towns of this section. All of which is telling in the rapid development of rose and flower production. While in its infancy, the creators of new Roses and flowers have a creditable number now on the market.

Portland, Oregon, has achieved well-merited fame for the luxuriousness of its Rose bloom

In the congenial conditions of the Pacific Northwest tree Roses present no cultural problems. (Home of J. T. Heffernan, Seattle)

In Portland, Oregon, the new plans for the extension of rose development and rose information through the Rose Test Garden, the Royal Rosarians, and the Portland Rose Society, will make the "Rose City" a greater rose center than ever.

In Tacoma, the new plans for the development of rose interest and the advantages of Point Defiance Park as a great rose garden, will bring Tacoma into more than usual prominence as a rose center. With its natural climatic, soil, and park advantages, it looks very much as if Tacoma will be able to give the rose lovers of the world information of high value.

In Seattle, the beautiful new Municipal Rose Garden in Woodland Park, and the many extra high-class private rose gardens, will give the enthusiastic and well-qualified rose growers of that city a very promiment place among rose growers of the world and put Seattle well up in the list of rose centers.

The Pacific Northwest will surely bring to the rose world at least these three centers of rose growth and rose information, each city having peculiar and distinct advantages which will be used for the benefit of all rose lovers.

While only these three rose centers of the Pacific Northwest are thus briefly mentioned there are new and old rose and flower organizations being rapidly brought to high efficiency in almost all the other cities and towns. The eyes of the rose world may profitably be directed to this truly great rose garden of the United States.

AMONG OUR GARDEN NEIGHBORS

Readers' Open Column for Exchange of Comment and Experience

Delphiniums 9 ft. High

TO THE EDITORS:

You may be interested in the accompanying photograph of a very fine semi-double English Hybrid Delphinium in the fourth blooming year. We have a number of these plants very similar in size to the one described, all of which range from seven to over nine feet in height each season. This one, however, was unusually fine, producing twenty-one flower spikes measuring as follows: one, 10 ft. 2 in.; two, 9 ft. 8 in.; two, 9 ft. 6 in.; two, 9 ft. 4 in.; one, 9 ft. 2 in.; nine, 8 ft. 6 in. down to seven feet; four, between seven and six feet. This plant stands at our rear porch and in front of a very fine climbing American Beauty Rose. The two plants in bloom together form a beautiful combination.

With ordinary culture, in the rear of a small city lot, we regularly grow Dahlias and Sweet-peas eight to ten feet in height. Last year we had one Dahlia Pride of California grow a full ten feet in height, branching like a tree from a single stalk, and covered with blooms the entire season. We plant Dahlias about the first of April, and each year have an uninterrupted blooming season from late June until we are obliged to take them up in mid-November for rest and protection against a possible freeze.—CHAS. W. RICKARD, *Seattle, Wash.*

Growing the Blackberry-Lily

TO THE EDITORS:

Recently while on a collecting trip I was waiting for a train at a good sized town and happened to see GARDEN MAGAZINE & HOME BUILDER at a news-stand. As garden magazines are not often sold here in this section I purchased a copy and was rather surprised to see an old friend in a new guise and the richer for the change, too.

I can "answer Ohio" (page 130, October, 1924) as I have grown the Blackberry-lily (Belamcanda chinensis) for many years or rather it has grown for me. All I did was to find a clump in the woods, bring it in, set it out, and it has flourished like the unworthy are reputed to do. This plant is very extensively naturalized in this part of the country especially about towns and on dry sandstone mountain slopes. It spreads readily by seed and at least one man complained to me that it was a pest in his pasture. As to the cold it will stand; our record here is about 20° below zero, but a reliable botanist, collector for the Arnold Arboretum, says he has seen it in northern Missouri where it stood temperatures of 30° below zero. I feel sure

WORTH WHILE LARKSPURS

No wonder that in the Pacific Northwest region the Larkspur has aroused a band of enthusiasts who are giving us continued improvements

that if planted in the spring in a well-drained sunny spot it would bloom that same summer for our Ohio friend and easily stand any winters there with slight protection or none at all. As this plant is a summer bloomer (July here) I feel that spring planting is better than fall planting as the plants are not dormant until nearly November. The rhizomes or crowns—similar to Bearded Iris—should be covered not over one inch. At long intervals separate the plants to their natural divisions and replant.—RALPH W. SHREVE, *Farmington, Arkansas.*

What Is the Poison in Daffodil Bulbs?

TO THE EDITORS:

On leaving home one morning, for a day of shopping in the near-by city, I had the usual interview with my cook, giving what I thought unusually explicit directions about the menu for our luncheon, which would probably be served in my absence: "And don't forget to add just a little onion to the soup," I called back.

Feeling that I had properly discharged my housekeeping duties, I hastened to catch my car and as many things demanded my attention, I did not get home until after noon. Imagine my consternation at seeing no one around when I entered the house and on hearing unmistakably ominous sounds. Hastening to the room whence the sounds proceeded, I found one of the children seriously ill. On questioning the one member of the family who was not affected, I found that she was the only one who had not partaken of the soup, about which I thought I had given such careful directions.

Greatly disturbed, I hastily summoned the doctor, then rushed to the kitchen to see if the cook could throw any light on the distressing situation. I found her with her head out the window in violent throes of sickness and it was some little time before I could talk to her. In reply to my questioning, she asserted most positively that she had followed all my directions in the preparation of the soup, to the letter, for it was plainly the soup which had caused the trouble.

After a careful investigation of all the things which had composed the lunch, it was decided that the trouble must have been caused by a can of Tomatoes which had been added to the soup, though the grocer from whom it had been purchased asserted most indignantly that he had been handling that brand for many years and that it was the most reliable one on the market.

The soup itself had all disappeared, one way and another, so nothing tell-tale could be found in that, and, if the cook had not been the sickest of the lot, she might reasonably have been suspected of trying to poison the family. The mystery remained unsolved for two or three months longer, until one day I was having the cellar cleaned and things generally looked over.

The cook (the same one that had made the soup) picked up a basket of Daffodil bulbs, that had been taken up in the fall and stored in the cellar, and asked, "what shall I do with these onions?"

The Genre Designs of an Old French Needlepoint *are reproduced in this Tapestry Covering*

Like antique French needlepoint, this tapestry is filled with animated vignettes

INTERWOVEN with homely humor and acute observation, replete with popular anecdote from edge to edge, the genre tapestries of the seventeenth and eighteenth centuries have a variety of interest that makes them unique not only among tapestries but among all decorative textiles.

In this fine modern tapestry are recreated the same abundant and interesting forms which patterned a superb antique French museum piece. The original was done not on a tapestry loom, but in the still older fashion of needlepoint. The modern replica shows the tiny, charming figures of the original, the mountebanks of old French countrysides with their dancing bear and fortune-telling bird. Flying insects, peacocks in pursuit, all richly filling every space, are all framed and held into the composition by a winding ribbon suggestive of a Chinese cloud-band.

Like the original, it records in soft wools and reds and yellows of primitive freshness the rise of democratic taste. Far from the mediæval themes of chivalry, from the sumptuous classicism of the Renaissance, it faithfully follows the example of the peasant scenes later popularized by David Teniers and Goya.

While this tapestry contains all the merits and charm of the original, modern developments in textile weaving have made it quite available for today's interiors.

Other tapestries representing the genre traditions of France, of Flanders, and of Spain are available in the Schumacher collection, while the whole range of tapestries, reproducing the best of the great periods, is unusually comprehensive.

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"Onions," I exclaimed, "why, Kitty, those are not onions. They are Daffodil bulbs."

"Well," returned the girl, "I thought they were onions and I put some of them in the soup that day."

Thus was the painful discovery made that the bulb of the Daffodil is not an edible product.—FLORA MCD. WILLIAMS, *Anchorage, Ky.*

—We read recently of a serious case of poisoning in Europe over an attempt to eat Daffodil bulbs.—ED.

What a Difference a little Planting Makes!

TO THE EDITORS:

Most of these gardens pictured in the magazine seem to be large and very beautiful, showing that money was used and that they were laid out by real landscape gardeners. Mine, on the other hand, has had very little money spent on it and no one but myself, a real amateur, to lay it out. It has just grown plant by plant, being loved into a very pretty place. As can be seen from the photograph it was very much in the rough when bought but there were beautiful views from it.

The front wall was built by my son and self —we bringing Cedars, Wild Currant, and other shrubs from the woods. Alberic Barbier Rose and a Memorial Rose are on the corners, tall growing Veronicas on both sides of steps, while Spiraea Vanhouttei, Deutzia and Pink Pet Rose make the bloom at right. The Rose at the corner of the house is Dr. Van Fleet which is indeed a thing of beauty. Cecile Brunner Rose is the other climber on the house and is always full of buds and blossoms early. Many trailing rock plants and ramblers are on the wall and a Magnolia tree in front.—MRS. LILLY C. DANA, *Wash.*

Lime and Larkspurs

TO THE EDITORS:

I can substantiate your observations in September issue on "Lime and Larkspurs." Two years ago I was on a place where the analyst said that our soil was deficient about three tons to the acre of lime, and we could scarcely grow Delphiniums and what did grow were very poor specimens. Where I am now, we are practically on limestone and you could not wish for better spikes and in such abundance that people stop and exclaim, "what lovely Larkspurs!"—CHAS. GARRITY, *Mission San Jose, California.*

TO THE EDITORS:

Never having heard of the disease called delphinium blacks I wonder if I might not have unconsciously solved the problem. About four years ago I planted some Delphinium seed in ground that had been filled in with coal ashes and covered with soil from our garden. The seeds grew and for the past two years I have had very fine full spikes of blossoms at least two feet long and the plants were five and six feet high. We have never given them any particular amount of care except to scatter barn manure around the roots. Enjoy your "News and Comments" very much.—MRS. S. A. MEAD, *Marathon, N.Y.*

REDEEMED BY FLOWERS

It hardly seems possible that the two accompanying pictures show the same house, the difference being largely brought about by suitable plantings. Vines may either hide the sins of bad design or emphasize the finer points of interest in good design

Flourishing Larkspurs

TO THE EDITORS:

After reading the article "Lime and Larkspurs" under News and Comment in the September number of GARDEN MAGAZINE & HOME BUILDER I decided to send my experience with Larkspur.

In 1921 I began raising perennials from seed and thus far have had wonderful success. My Larkspurs are perfect in every way. This year they were 7 ft. 4 in. in height and the individual blossoms on the stalk were two inches in diameter. I have both light and dark blues and both black and white eyes. Have never had any kind of trouble with them and I attribute my success to lime soil also wood ashes placed over crown of plant after freezing.

I enclose photograph of some of my Larkspurs, also other photographs of my garden and home. [Unfortunately not suitable for reproduction, but confirming the foregoing statements—ED.] This home my sister and I had built in 1921. I drew the plans for it, bought the material and had it built by day labor, overseeing the work myself.

Our garden work we do ourselves—except plowing. We have half an acre of ground and we use every bit of it as we have 12 fruit trees, 6 Grape vines, Strawberries, Asparagus, a large vegetable garden, and loads of flowers.—(MRS.) MINNIE NORDLING JACKMAN, *Crystal Lake, Ill.*

SEDUM TERNATUM

The three leaved Stonecrop native in a large section of the country is a welcome plant for the partly shaded rock garden. White flowers April to June

A Rock Plant for Partial Shade

TO THE EDITORS:

The low-growing Stonecrops are excellent plants for the rockery, as the name indicates. One of the native American species that grows well in a partly shaded rock garden is the three-leaved Stonecrop, Sedum ternatum. This plant has been known for over a hundred years, the species having been named by Michaux in 1803. In 1814 Frederick Pursh, the British botanist who had spent twelve years studying the plants of this country, described it as "an elegant little species." Outside of the botanies, however, it seems to have received little attention, yet is offered I find by a couple of dealers whose recent catalogues have reached me—Purdy and Robbins. It was not mentioned in Miss Rathbone's interesting "Adventures among the Sedums" in the GARDEN MAGAZINE a few years ago (April, 1919). But it is one of the easiest subjects to transplant from its native haunts. The plant is not only perennial but practically evergreen, and the way it fills chinks and spreads its small round leaves over the adjacent rocks gives it an appealing charm even at other times than the flowering season, which comes in April to June. Then the white flowers first appear at the center of a peculiar two to four forked flat "cyme" and gradually open out until each fork has ten or twelve starry blossoms twinkling against the deep green of the waxy leaves. The plant shown in the picture is one of several collected in rocky woods along the Potomac River in 1923 and was photographed in May, 1924. These plants get some sunshine in the early morning and late afternoon but the rest of the day are in moderate shade. Here

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they thrive with Thalictrum (both the native species and the Chinese T. dipterocarpum), Rocky Mountain Columbine, Saxifrage, Lemon-lily, blue Flax, and Maidenhair Spleenwort.

The rockery was built on a sloping bank of coarse cinders at the end of a driveway, good soil being filled in as the rocks were placed in position. The earth has gradually worked down into the cinders, so that the planting spaces do not dry out too quickly; at the same time they are well drained—two requisites for most rock plants.

The natural range of Sedum ternatum is said to be from Connecticut to Georgia and westward to Michigan, Indiana, and Tennessee. It seems to be able to grow in only a spoonful of soil, and it can be transplanted in either spring or fall.—BERNARD H. LANE, *Washington, D. C.*

Experiences with Cyclamen from Seed

TO THE EDITORS:

Seeds of Cyclamen coum, europaeum, europaeum album, neapolitanum, and repandum can be obtained from: Rev. J. F. Anderson, Glenn Hall, Leicester, England; and I suggest that Mr. Haughton, who inquires in the October issue try—or try again—to raise from seed the species mentioned in that issue of GARDEN MAGAZINE & HOME BUILDER, if he cannot obtain the bulbs; for with patience and proper care they can be raised as easily as the more common C. persicum of the florists.

My experience with Cyclamen might be of interest. Of course California is an ideal place for the culture of Cyclamen, for it closely approaches the climatic conditions of their native habitat; and even the tender persicum can be raised out-of-doors. But with proper care they can be raised elsewhere.

This is my method: place the seeds a half inch apart in well-drained pots of light soil,and cover with about a half inch of soil, consisting of sand, rich garden earth, and leaf mould. Water frequently in order that the soil may always be damp. It is well to place a little moss upon the surface. Place the pots in a sunny window at a temperature of about sixty degrees. Now for the patience! Expect the seedlings to send up one leaf in from three weeks to six months. If the seeds have not been planted deep enough, or if the air, or the soil, be too dry, the leaf will come up with its seed coat around it; and if the air is dry it will *not* come off, usually killing the leaf: hence the value of a damp atmosphere. If the leaf comes up properly, as soon as it unfolds perfectly, the plant should *at once* be put into a small individual pot, with the bulb about a half inch under the soil, and a layer of leaf mould placed upon the surface. This soil should be just like the other, with the exception that one part of well-rotted manure is added. These little plants should be kept in a cool, moist place where the sun can filter in upon them, but where it cannot fall with its full force. There should be no draughts, although the air should always be fresh. In California I keep my little plants outside under a tree branch, protected from draughts on all sides by a screen of cloth, with only the top exposed. Some use a lath house with the same results. With this method my plants grow on as though they were in their native haunts.

The reason that I lay such stress upon potting the little plant with the first development of the first leaf is this: if I wait until the second leaf comes up, and then transplant, the invariable result is that the second leaf dies, and the plant receives a check.

When the plants get to growing well, leave them alone except to repot when they outgrow their pots; and do this very carefully. The rule is: when a Cyclamen is growing well—leave it alone; it objects to being disturbed. When the plants are about a year old they should have a resting period of about two months before allowing them to bloom; that is, stop watering them, but do not let them become actually dried out. The final transplanting should leave the bulb about one fourth out of the ground. I usually sow my seeds in the late summer, keep the seedlings growing all winter; in August and September they rest; and that fall they begin their season of flowering: this is the same cycle that all the native bulbs of California go through—growing season beginning with the fall rains; a dry season in summer; blooming season in late winter and early spring. But of course these conditions can be controlled, and here, at least, one can successfully grow Cyclamen at any season.—R. V. BRADSHAW, *Palo Alto, Cal.*

A Mid-West Quick Resurrection

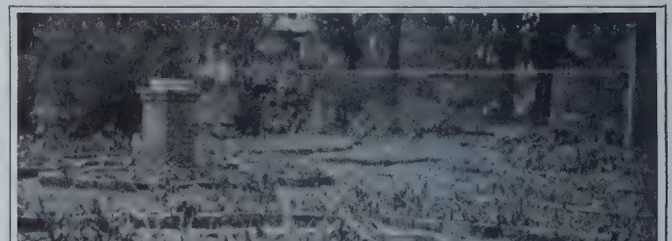
TO THE EDITORS:

As a steady reader, I have become much interested in other people's gardens, so perhaps others might be interested in what happened in mine this year.

June 12th, we had a tornado accompanied by hail, some of which were large as hens' eggs. For fifteen minutes this hail, driven by a terrific wind, bombarded our houses and gardens relentlessly. It came with such force the siding of the houses was split, screens and windows broken, and curtains and shades torn into shreds.

My garden was gorgeous the night before, but you can see from the picture how it looked the next morning. A week later we had a cloudburst that lasted three hours, the garden being under water for over twenty-four hours.

Like the ants, Dame Nature and I builded again, and just four weeks later I took the other picture. It is almost impossible to believe.—P. D. PETERSON, *Galesburg, Ill.*



THE UNDISCOURAGED GARDENER

This Illinois garden was laid low by hail and tornado on June 12th but in four weeks it wore a new dress of flowers and color as shown by the lower photograph

There Are Moonflowers—and Moonflowers!

TO THE EDITORS:

On page 292 of the January, 1924, number, under the heading "Beware of the Moonflowers," is a case of mistaken identity which may possibly prevent some one from trying one of the loveliest and most satisfactory tender vines I have ever seen. The one spoken of as a desirable porch vine is Ipomoea grandiflora—a clean, fragrant, interesting, and altogether desirable annual. The one we are warned against, and rightly, is Ipomoea pandurata, a hardy native perennial, the more you try to kill it off, the more it grows faster. I have seen it growing and flourishing in the rock ballast of a railway!

If Anna E. Hill will try the real Moonflower, she will, I am sure, decide that nothing good can be said of it which it does not richly deserve. Let her grow it from seed (clip off a tiny bit from the more pointed end and soak a while in warm water) or she can buy one from any florist for ten or fifteen cents in May. The frosts of autumn will end it, but I am sure she will want to have another the next year.—A. M. B., *Catonsville, Md.*

Dreer's Garden Book

For 1925

ABOUNDS with practical garden suggestions of the kind that assure it a hearty welcome in nearly 200,000 garden homes every year. We desire to place this 224-page book in *more* homes for 1925, feeling that its straightforward descriptions, honest illustrations and fair valuation of topnotch merchandise will appeal to those in search of better gardens.

Back of the Dreer Garden Book stands an organization of men and women whose lives have been devoted to helping others get more out of every garden effort. Whether you "go in" for finer Roses, Dahlias or flowers in general or your purpose is to produce vegetables, we feel sure that the advise of many "seasoned" gardeners incorporated in the book will lead you to garden success.

All customers of record will receive the 1925 edition automatically early in January. New readers will oblige us by writing for their copy at once and please mention this publication.

HENRY A. DREER

1306 Spring Garden Street Philadelphia, Pennsylvania

Woodland Gems

and Shipping Service

It's one thing to grow a creditable plant product. It's another thing to ship plants so as to reach the customer in satisfactory shape. Judging by the friendly letters I receive *that* problem has ceased to be one in connection with Gillett Service.

A year ago I shipped four dozen Azaleas *in full bloom* to a customer in northern New York. When he received the shipment he wrote at once, saying that not a branch was broken, none of the flowers were withered, of the entire shipment.

Among numerous testimonials received this last shipping season, one pleased Long Island customer wrote as follows:–

> "It would be very unfair to your packers were I not to express appreciation of the thoroughly craftsmanlike manner in which this stock was handled at your end. I have never seen anything prettier than the way this stock was arranged in the two boxes, not a single plant being displaced, bruised or untied."

So, that's one assurance I can give my patrons: They will receive stock ordered in such condition as to cause the unpacking to be a pleasure in itself.

A copy of my free catalogue will gladly be sent to those interested in naturalistic plantings.

EDWARD GILLETT Fern and Flower Farm 3 Main Street Southwick, Mass.

Bessie Boston Dahlias

A few Bessie Boston Prize Winning originations are:

Ballet Girl
California Superba
Carmencita
Champagne
Daddy Butler
Dreamlight
Elizabeth Boston
Eliza Clarke Bull
El Dorado
Elise Drexler
El Granada
Esther Hunt
Elsie Oliver
Galatea
Gladys Bates
Gorgeous
Jane Selby
J. W. Davies
Kiku
Kittie Dunlap
Koh-I-Noor
La Mascotte
Mariposa
M. H. De Young
Papillon
Regent
Romance
Rookwood
San Mateo
Shudow's Lavender
Susan G. Tevis
T. A. Leonard
Talisman
Tanforan
Tommy Atkins
Vivandiere

Many new varieties for 1925
Including a Gold Medal pink

Bessie Boston Dahlia Farm

San Mateo, California

1925 Catalogue Ready in January

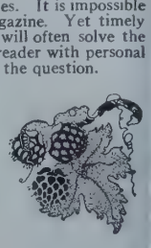
GARDENING FOR THE BEGINNER

THE MONTH'S REMINDER—DECEMBER

As to Time and Place: In gardening practice a date can only be approximated as seasons vary and local conditions will have some influence. Generally the latitude of forty degrees at sea level and a normal season is taken as standard. Roughly, the season advances or recedes fifteen miles a day, thus Albany would be about ten days later than New York (which is latitude 40). The latitude of Philadelphia is a week earlier. Also allow four days for each degree of latitude, for each five degrees of longitude, and for each four hundred feet of altitude. Latitude forty passes through Philadelphia, Pa.; Columbus, Ohio; Richmond, Indiana; Quincy, Ill.; Denver, Col.

How to Use This Guide: Suggestions as to the most important things of the month are given in this department so as to "remind" the gardener of the current duties. For routine details of such things reference should be made to standard handbooks and guides. It is impossible to make a complete manual of practice in each number of a periodical magazine. Yet timely articles will be found elsewhere in each issue, and references to back numbers will often solve the immediate question. Moreover, the editorial staff stands ready to help any reader with personal advice by mail. A self-addressed stamped envelope should be enclosed with the question.

Who Writes This: The advice and instruction in this department are the gleanings of many years experience in practical gardening matters by competent amateurs and others who have "been through the mill." The contributions are made from various sections of the country: for example, Mr. Jesse A. Currey contributes from Oregon; Mr. Theiss from Pennsylvania; Mr. Henry Gibson from Pennsylvania (formerly from New York); Mr. Sherman Duffy from Illinois; Mr. A. Kruhm from an extensive Eastern acquaintance; and, in addition, occasional notes from elsewhere and by the editorial staff and associated contributors of experience.



AT THIS season of the year, we transfer our gardening to the house. Whether we have hothouses or merely window nooks in which to place a few flower pots, all of us like to make a success of our efforts at winter gardening. Despite constant care and faithful watering, many plants droop and decline during their enforced residence within doors, and their owners wonder why they cannot raise flowers successfully indoors. Such difficulties will end if plant raisers will make it a rule to have the humidity within the house correct.

WHY HOUSE PLANTS DIE

OUT of doors, where conditions are just right for plants, nature provides a certain amount of moisture in the air. The atmosphere is always saturated to certain degrees. Thus it may be fifty per cent. saturated, or seventy-five, or one hundred. At one hundred, rain falls; the air will hold no more moisture. Normally the air is perhaps from fifty to sixty per cent. saturated. The relative humidity rarely falls much below fifty except in very dry places. In deserts it sometimes reaches thirty or even twenty per cent. But such dryness is abnormal. Yet we dry out our houses in winter by the use of steam heat and hot air, until we have an indoor atmosphere like that of the desert.

Nature has so constituted the air that it must have considerable moisture. When the air itself becomes dry, it instantly proceeds to suck the moisture out of everything else—furniture, books, human bodies, and flowers and plants. The effect upon humans is that the throat and nasal membranes become dry and parched. They crack and become diseased. Normally the inside of the nose should be moist, so as to catch dust particles. In winter, our nasal passages are dry as bones. They are like old, dried-out leather. Furthermore, the shock of changing from this abnormal indoor air to the normal outdoor air also affects us. So in winter we have colds, and pneumonia, and influenza, and a host of associated diseases that we never dream of having in summer.

When your flowers pine and droop indoors, it is easy to guess the reason. If the house atmosphere will make the human occupants sick, it will do as much for the plant occupants. So keep your hothouse or plant room moist. Have some free air entering, if possible. Have some pans of water where they will evaporate quickly. Let the steam cocks spout steam into the room. Do what you can to moisten the air, and you will see the difference in your plants.

DAYLIGHT AND FLOWER PRODUCTION

IT HAS been discovered that the length of the daylight period controls the blooming of many plants. One can now apply this law in the home with great pleasure and profit. Roughly, plants divide into two groups—those that bloom when the days are long and those that bloom when the days are short. Short-day plants bloom in spring and fall, when the days are perhaps ten hours in length. Long-day plants bloom when the days are fifteen hours long. By artificially making the day ten hours long, in summer, one can force autumn flowers into quick bloom. This is done by cutting off the light during a part of each day. In winter, by adding to the light, one can force long-day plants into bloom. Thus Iris, Rhododendron, and myriad other plants that bloom in late May, in June, and in early July, can be brought into flower at Christmas time and later in the winter, merely by supplementing the normal daylight with electricity. Hang an extra bulb or two close to the plants you wish to force into bloom, and let the light burn from sunset to eleven or twelve o'clock each night, and your plants will soon be in flower. This is an interesting experiment and will produce blooms that both please and astonish.

BUILD OR PLAN A CONSERVATORY NOW

IT MAY be a little late to be making your conservatory, but it is just the right time to be making plans for building one next summer. The most ingenious conservatory I ever saw was made by a home owner at little cost. Close to the furnace room of his cellar he had an outside stairway leading down to the cellar, with the usual hatch-like doors covering it. He framed his little conservatory so as to enclose this hatchway. By opening these cellar doors, he let the warm air from his furnace room into the conservatory. He could have run a hot-air pipe into it if necessary. The glass for the conservatory consisted of old photograph plates scraped clear of film.

TAKING CARE OF THE TOOLS

DECEMBER sees the absolute end of the garden season. All work is done in the garden. Now is the time to finish odd jobs that have been overlooked. One of these is to put the tools in shape for the spring campaign. Whatever needs mending should now be mended. In particular, now is the time to clean and oil tools. All iron surfaces, such as spade blades, plow shares, or cultivator teeth, should now be scoured bright with a brick and then oiled. Woodwork needs oiling just as much as metal. Take a rag and rub oil well into fork and rake and spade handles. This will add greatly to the life of the wood and make tools last for years.

WHAT IS THE USE OF A MULCH?

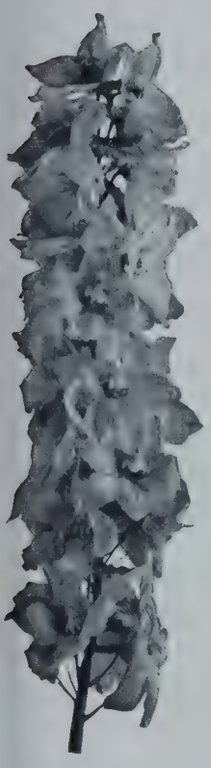
MULCHING is now in order. All non-hardy plants must be protected before real cold weather arrives. The strawberry bed should be covered with straw. If the garden soil is bare, it can be mulched with profit. One of the best gardeners I know never digs manure into his garden; instead, at this season of the year he puts a heavy coat of manure over his garden. All winter long the rains and the frost carry the leachings down into his soil. In spring he rakes off the manure. His soil seems to remain in fine condition. He raises wonderful crops. Probably it would be better to dig the manure in; but at any rate, it is a mighty good practice to mulch the garden with it during the winter. The soil is both enriched and kept from blowing away. The asparagus bed in particular should be mulched with well-rotted manure.

TRY A LITTLE FORCED ASPARAGUS, ETC.

ASPARAGUS roots can now be lifted for forcing. They must be kept cold until wanted for use, then put in moist, warm soil in a warm place, when shoots will soon appear. Thus one can have

(Continued on page 272)

Why Send East for Plants that are Grown in the West?



RIGHT here in California my garden has a larger variety of hardy plants than is found in most Eastern catalogues, and includes one of the finest collections of Iris in America, a wonderful assortment of Perennial Phlox, Michaelmas Daisies, Hollyhocks, and a world of unusual rock, border, and pond plants.

The winter climate of my mountain garden has a real snap to it, with late frosts, thus producing retarded and hardened plants which can be shipped and transplanted much later than those from any other Californian source.

Twelve Campanula Medium or Canterbury Bells—white, rose, dark, light blue. Nice plants $1.00 postpaid.

Twelve Delphinium Belladonna grandiflora. Light blue. Nice plants $2.50 postpaid.

Twelve Delphinium Bellamosum. Sky-blue. Nice plants $2.50 postpaid.

Six Salvia Pitcherii, a lovely deep blue, on tall spikes. Nice plants $1.50 postpaid.

Safe arrival of all shipments guaranteed. I pay carriage; risk the loss in transit; and can help you with your planting problems. My long experience is at your service.

My new catalogue of Hardy Plants is most useful; you may have a copy on application.

CARL PURDY Box 54, Ukiah, California

t the Mountains Send our Christmas Message

BOX of fragrant evergreens from the Carolina Mountains will bear an unal message and give a distinctive touch to Christmas decorations in your friend's ie. They will carry, as nothing else can, real Christmas spirit, and will retain for y days their freshness and brilliant natucolorings.

Special Prepaid Box Prices

Case N. Assorted Galax leaves, Leucothoe, Ground Pine, American Holly, . $3

Case O. 1,000 assorted Galax leaves, Leucothoe, Balsam Fir, Ground Pine, American Holly, ... $5

Case P. 2,000 assorted Galax leaves, 50 Leucothoe, 25 Ferns, 6 Fir branches, 6 sprays Holly, one lb. Bouquet Green, ... $8

cards to be enclosed in each package to your friends. I see that the greens are properly packed and mailed in ample time for hristmas decorations. Remittance should be post office order or check.

C. ROBBINS, Pineola, North Carolina

Glass Gardens

The materials and equipment throughout are absolutely top notch. The same, in fact, as goes in our best houses.

For So Little As 1650 Dollars

JUST to show you how popular this fine little house has become, five of them were shipped last month, from our Eastern factory alone.

It is the same fully equipped splendid house that was first shown at the New York Flower Show, last March.

To those who saw it, there was no little wonderment about how the complete materials and equipment for so fine a house could be bought for so little as 1650 dollars.

Our answer to that is best told in our special circular, called "For So Little as 1650 Dollars."

Send for it.

Don't go through another winter without the glass garden you have so long wanted.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

Eastern Factory Irvington, N. Y.		Western Factory Des Plaines, Ill.	Canadian Factory St. Catherines, Ont.
Irvington New York	New York 30 E. 42nd St.	Philadelphia Land Title Bldg.	Chicago Cont. Bank Bldg.
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Greensboro, N. C.

All this indoor gardening space is yours for the flowers you love and the vegetables you crave.

Sutton's Seeds

ENGLAND'S BEST

THE garden of your dreams will become a glorious reality if you plant Sutton's dependable seeds.

For one hundred and seventeen years Sutton's Seeds have been recognized as England's finest. Small wonder that gardeners and growers in all parts of the world are, year after year, insisting on Sutton's Seeds.

True, they are a trifle more expensive, but the splendid results obtained from Sutton's Seeds—the large, luxuriant blooms and sturdy plants will repay you many times over. And what a pride in displaying not only flowers in glorious profusion, but unique varieties rarely seen in this country.

Let us help you plan your garden. Send to-day for our new catalogue and Guide in Horticulture. This book is beautifully illustrated with actual photographs of specimens in full colors. Also it contains a fund of valuable information regarding the culture of flowers and vegetables.

We will be glad to mail this book to you for 35 cents (international money order), which will be refunded on your first $10 order. Send for it to-day.

Sutton & Sons

Royal Seed Establishment

Reading Dept. A England

The seed business with a history of 117 years

(Continued from page 270)

fresh asparagus in winter. The roots so used, however, are as good as done for. It would not pay to put them back into the garden. But one might raise a row of roots for this especial purpose.

Rhubarb roots can be handled in the same way. They should be dug after cold weather arrives, but before the ground is frozen too hard to dig. Then the roots are frozen and kept frozen until needed. They are forced by planting in warm, moist soil in a warm place.

LOOK TO THE WINTER CABBAGE

IF YOU have not already done so, now is a good time to wrap your winter cabbage. If each head is wrapped in paper, so as to keep it separate from the other heads, the cabbages will keep much better. Then if one head starts to spoil, its neighbors will not be so readily affected. The cabbages, of course, must be stored in a cold cellar. The paper will also help in preventing them from freezing.

STORING FRUITS FOR USE

IF YOU are accustomed to store apples or other fruit for winter, it is worth while to wrap some of the fruits in paper, like the fancy apples one buys at the stores, or the high-grade oranges. Our own practice is to select a quantity of the best keeping apples to be stored for use in the late spring when everything else is gone. These we wrap in paper. Apples to be eaten earlier we do not wrap. We can usually consume them fast enough to keep ahead of the rot. But if you want fruit to keep a long time, don't fail to wrap each piece.

Root vegetables are kept best by storing in moist sand in a cool cellar. Or they can be piled and covered with sod. In either way, they are kept from wilting.

Parsnips can be stored indoors, with the other roots, or left in the garden. Freezing does not harm them and seems to sweeten them. But it is next to impossible to lift any of them after the ground is frozen. Whatever parsnips are wanted for winter use, therefore, had better be put in the cellar now.

THINK NOW OF NEXT SPRING'S SEED-BEDS

IF YOU want some especially early seed-beds for next spring, now is the time to prepare them. Throw up the ground in a high narrow ridge. This can be made along one side of the garden so it will not interfere with the culture of the remainder of the garden. The soil so elevated will drain rapidly, particularly if a ditch is dug along each side of the elevation, and you will be enabled to sow plants in this elevated seed-bed weeks earlier than you can on the lower level.

TRY A LITTLE BREEDING ON YOUR OWN

EVERY gardener has the possibility of growing better flowers than his neighbor if he uses a little observation. The easiest means of developing a strain of plants is by "selection," which means raising a number of the same variety and throwing away those with small, irregular, or poorly colored flowers, keeping the better sort for propagation either by seed or dividing the roots. It is by this means we get our finest plants.

Nearly all our garden plants are hybrids, that is, the blood of several species or varieties enters into their makeup and some of these traits will appear in the seedlings.

In the Daisy family, a very large garden family known to botanists as the composites, because each "flower" is really a collection of a large number of tiny flowers, the variation is strongly marked and to get a good strain of Shasta Daisies, for instance, or the big white Chrysanthemum maximum, a close relative, it is necessary to raise more plants than we want; grow them to blooming size, and take the best, throwing away the inferior. The Shasta Daisies show considerable variation. The small-centered varieties with the long snowy ray flowers or petals are seen at once to be the best. Those with the short petals and the big center should be discarded. Some will have double rows of petals and some single. The double

(Continued on page 274)

Birds and Color in Winter Gardens

Dull, drab, winter gardens are made cheerful with brilliant berried shrubs. The colors add joy to the garden, and winter birds will come for food and shelter. Hicks' "Time-Saving" berried shrubs are ready now to be transplanted to your garden, and will start a bird sanctuary—

Winterberry. (Ilex verticillata). Red fruits, 2 ft. 50c.; $4.25 per 10.
Photinia villosa. Scarlet fruits. 2 ft. $1; $9 per 10; 3 ft. $1.50; $12.50 per 10.
Sweetleaf. (Symplocus paniculata). Blue fruits. 2-3 ft. $2; $17.50 per 10.
Cotoneaster dielsiana. Scarlet fruits. 2 ft. 1.50.
Cotoneaster divaricata. Bright red fruits. 2-3 ft. $1.
Cotoneaster Francheti. Evergreen; red fruits. 1½ ft. $1.50.
Cotoneaster zabelli. Dark red fruits. 2 ft. $1.50.
Viburnum venosum canbyi. Black fruits. 2-3 ft. 75c; $6.50 per 10.
Viburnum dilatatum. Bright red fruits. 2-3 ft. $1.
Honeysuckle. (Lonicera tatarica). 2-3 ft. 75c; $6.50 per 10.
Shadlow. (Amelanchier lævis). 1-2 ft. 50c.; $4.50 per 10.

Hicks' "Time-Saving" Evergreens—Evergreen, Deciduous trees and shrubs can, with perfect safety, be planted in December. They will grow, if they don't, we will replace them free at the nurseries.

HICKS' NURSERIES

Box M. Westbury, L. I., N. Y.

JESSIE L. SEAL

Originator and introducer of the **Jessie L. Seal** dahlias, noted for their wonderful beauty, size and other superb prize winning qualities.

Winner of the *Gold Medal*, at the 1924 annual exhibition of the Dahlia Society of California, for the best display of dahlias,—the Palace Hotel trophy cup for the best collection of California dahlias—and again won the First Prize, with **"Amun Ra,"** for the best 50 blooms of any one variety.

AMONG 1925 INTRODUCTIONS ARE:

Ellinor Vanderveer—Beautiful pink decorative
Olive Reed—Immense yellow decorative

Illustrated 1925 catalogue with pictures of our exhibit and full descriptions of the above dahlias and other prize winners, will be sent free upon request.

Office 609 Third Ave. **San Francisco, Cal.**

Distributors for Sies Dahlia Manual. Price, 60 cents

It Speaks Well for Stillman's Dahlias

The other day the Advertising Man was visiting one of the largest Dahlia Trial Grounds in the East. It had been a most trying season so that only *inherent* merit brought out the best. At the far side of the patch, head up and shining across many rows, strikingly stood a deep orange beauty. "That"—the guiding expert explained, "is Stillman's U. S. A.—still hard to equal and harder to surpass."

I am proud of this compliment, because it came from an unbiased critic and competitor. You'll be proud, too, of your next Dahlia Garden, if it holds good U. S. A.; Stillman's Millionaire, the immense, yet dainty lavender, with pink sheen; Our Country, the royal purple and white tip combination; Billionaire, Lady Helen, and others that are becoming increasingly popular.

Let me mail you my catalogue and become acquainted with a glorious group of five new Dahlias which, in honor of their native state, I have named after five famous figures in Rhode Island history. More revolutionary Dahlia Novelties have been born at Westerly than at any other point, and at a little above 60 I am still going strong. I am looking for your Catalogue request.

GEORGE L. STILLMAN
Dahlia Specialist
BOX C-25 WESTERLY, RHODE ISLAND

A Winter Garden
built complete in two days

A COZY little greenhouse offers you one of the most enjoyable and profitable pleasures in the world—the growing of your favorite flowers and vegetables, all the year round.

A Callahan greenhouse enables you to start your outdoor garden at least a month earlier, because your tender plants have been developed and sheltered all snug and warm within its dainty portals.

Winter need not deter you. Callahan Unit Built Greenhouses can be erected easily and quickly, even in severe winter weather.

They are factory built in units; shipped painted and with all glass installed, ready for quick assembly. Hardware is attached—screw holes are drilled. Just a few household tools are required to erect your winter garden.

The Greenhouse Book will give you detailed information. Send for it at once.

THE T. J. CALLAHAN COMPANY
312 Stout Street Dayton, Ohio

"THE GREENHOUSE BOOK" SENT FREE

THE T. J. CALLAHAN CO.
312 Stout Street, Dayton, Ohio
Send me The Greenhouse Book and prices.

Name .....

Address .....

"DAHLIAS ELITE"

Announcing for 1926 "Elite Glory"

The World's Greatest Dahlia

Originated by W. W. Kennedy & Sons, Red Bank, N. J.

THIS brilliant red decorative created a sensation at all the leading Eastern shows this year. At the New Jersey State Show at Trenton it won sweepstakes prize for largest bloom in show; at Red Bank it received the same award; at New York it received a special Award of Merit for best undisseminated seedling. At the American Dahlia Society trial grounds at Storrs, Conn., it scored 91; at the New Jersey State Dahlia Society trial grounds, New Brunswick, it scored 91. If you ask anyone who saw "Elite Glory" they will tell you in all fairness it is a remarkable Dahlia.

At the New York Show we booked many orders for "Elite Glory," some of them for foreign countries. Undoubtedly this is the most spectacular dahlia shown to date. Never before have such gigantic graceful blooms been grown on such excellent stems with keeping qualities second to none. If you want to know more about Elite Glory ask for

1925 Catalogue—Ready January 1st

In our great collection you will find all of the best varieties from East or West. Among our other new ones is "Elite Supreme," our beautiful hybrid-cactus that was the seedling winner at Red Bank in 1923.

W. W. KENNEDY & SONS

Red Bank **New Jersey**

The Home of "Dahlias Elite"

Fence before Winter Comes!

Enclose your grounds with a strong, unclimbable Page Fence—establish a fixed boundary line that discourages intrusion—increases property value—permits full development of lawn and grounds—makes you the real owner of your real estate.

Page is the strongest, most durable protection fence made—has a rust-resistant zinc coat approximately *5 times heavier* than that on ordinary fence.

There's a Page Distributor near you who will furnish plans and estimates—write now for his address, and for the illustrated booklet, "FENCES FOR PROTECTION AND BEAUTY" showing typical installations. No obligation—a postal card brings it.

The Page Fence & Wire Products Association
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Distributing wire-link products for the Page Steel & Wire Co., Associate Company of the American Chain Co., Bridgeport, Conn.

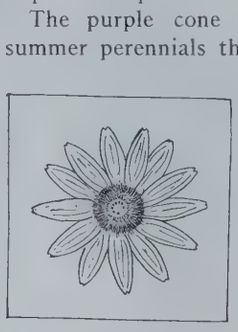
"America's first wire fence-1885"

PAGE
PROTECTION FENCE

(Continued from page 272)

rows give the best effect. A little observation will show the way to improve the plants at home.

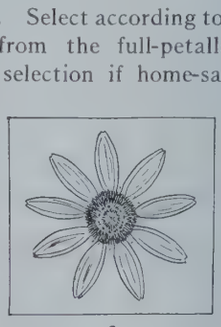
The purple cone flowers, Rudbeckia purpurea, stately mid summer perennials that give a long season of bloom, because of their larger flowers show this variation very distinctly. The drawings show blooms from four different plants raised from the same packet of seeds. The better plants are obvious. No. 1 is the largest and fullest flower. No 2, a smaller and even fuller-petalled flower because of a double row of petals is excellent. The other two are thin and few petalled and should be discarded.



2

Along with the fullness of petals and general form of the flower goes selection for color. Some will be washed out, some delicate others deep and clear. Select according to personal taste.

Save seed only from the full-petalled, large-flowered forms. Asters need careful selection if home-saved seed is to be used. Save only from flowers double to the center. Do not use those with open centers showing the yellow disc flowers. The best flowers give the best seed.



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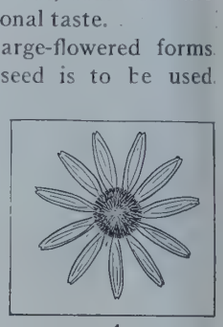


4

Gaillardias give many thin-petalled forms from a packet of seed. Save only the full-petalled round flowers. If the inferior forms self-sow the quality will deteriorate. It is surprising how quickly the quality of annuals and perennials may be improved by a little attention along this line.

If you have available space, it is best to grow perennials to blooming size in some out-of-the-way corner and then select the best for permanent planting or at least have a few in some out-of-the-way corner to replace those planted in beds or borders which prove inferior.

SHORT CUTS FOR THE CALIFORNIAN

THIS is a favorable month for pruning and transplanting Roses; prune back to firm wood, not allowing too many stems for new shoots, and make cuttings from the prunings. Cut about six or eight inches long from firm, mature wood, and plant in rows in the open ground or in boxes, with two buds above and three below the ground. Thin out climbing roses, cutting out all dead wood and tying up securely. Spade and fertilize the beds.

Candidum, auratum, and speciosum Lilies may now be planted; also California Lilies and wild flowers such as Brodiaea, Mariposa-lily, Iris, Calochortus, and Cyclamen. Spade the beds deep, turning in old manure, and plant the bulbs in sand for warmth and drainage, putting them in partial shade and protected from wind. Mulch with old manure.

Evergreen shrubs and trees may be pruned this month and deciduous trees and shrubs may be pruned and transplanted, and cuttings made from the prunings. All trees and shrubs affected with scale should be sprayed. Deciduous vines may be set out or transplanted, after pruning and cutting out all dead wood.

Thin out the young plants coming up from seed and give plenty of growing room. Sweet-peas (Spencer type) may still be sown for spring blooming.

The Christmas Holly or Toyon (Photinia arbutifolia) native to California, is now bearing berries, and the seeds may be sown for propagation. Also the seeds of Cotoneaster and Pyracantha, although the latter has a tendency to variation.

Cut down spent Chrysanthemum plants, marking with a stake all those to be kept for future cuttings.

GARDEN MAGAZINE & HOME BUILDER

Vol. XL, No. 5 JANUARY, 1925

Mattie Edwards Hewitt, photo.

"These are spurs that fell from heaven and caught the most amazing
Colours of the welkin's own as they came hustling down"
Robert Ernest Vernède

ONLY FOUR MONTHS AFTER PLANTING

Portion of the old-fashioned flower garden in the Demonstration Grounds of THE GARDEN MAGAZINE & HOME BUILDER, *Garden City, N. Y. With only the evergreen background and the Dogwood shown on the right foreground already in position, the entire border and lawn were made and planted in May of last year and photographed in September. Carpathian Bellflower and Elizabeth Campbell Phlox in foreground. Larkspur, Gladiolus, Hollyhocks, and Chrysanthemums*

Mattie Edwards Hewitt, photo

"Paths that lead to mazes of the growing things,
Guided by their perfumes, stirred Robin's wings"

THE ATMOSPHERE OF AGE

The walk of irregularly laid stepping stones with little plants allowed to crop up in between gives a feeling of age and repose. In the borders are Phlox, Iris, Veronica, Hollyhocks, Peony, Larkspur, Rhododendrons, and such like herbaceous stand-bys. The tall evergreens are Red Cedars and Arborvitae, Garden of Mr. A. L. Kramer, Westbury, Long Island. Mrs. Ellen Shipman, Landscape Architect

John Wallace Gillies, photo.

"Though habitation none appear
The greenness tells, man must be there"
Wordsworth

THE WOODLAND APPROACH

The subtle informality of this woodland approach is a masterly transition from the well tended garden to the natural woodland—a detail that is too often overlooked in the fevered making of gardens. Garden of Mr. James Parmelee, Washington, D. C. Charles A. Platt, Architect

NEWS AND COMMENT

POSSIBLY nothing causes the gardener more anxiety and worry than the unhardiness of certain hardy plants. Unfortunately, hardiness is not a positive quality. It is relative; and a given plant will usually be less hardy in the North than in the South, but there are other factors that influence this winter tenderness of plants.

Plant hardiness has long been a topic of conversation among gardeners but the recent investigations of the Shaw Botanic Garden at St. Louis are perhaps on the whole as practical as anything that has yet been done. The results are instructive but not encouraging, since they show that winter tenderness in plants normally hardy is associated with smoke conditions in the atmosphere. Snapdragon and such like plants succumb to poor atmospheric conditions.

IS THE CLIMATE CHANGING?

IT IS inevitable as the cities grow in density of population, expand, and encroach upon the open land of their fringes that the belt of hardiness recedes more and more. That will explain why some experienced gardeners in the suburban belts complain that plants which used to be hardy are now tender and they wonder whether or not the climate is changing.

No, the climate is not changing. It is the price you pay for the growth of the urban belt. The first things in our gardens to suffer will usually be the evergreens for they are unable to shed their leaves with the accumulations of soot and grit that adhere. And then the less adaptable herbaceous perennials gradually succumb. All this is unfortunate, but true.

The remedy lies in the real gardener being continually on the move and keeping on the outposts of civic progress.

WHITE PINES OR BLACK CURRANTS?

"OR" IS deliberately used in the question shall we grow White Pines or Black Currants? There is no question about the danger that the one is to the other. The White Pine is one of the most valued of our trees whether considered from the forester's viewpoint or from the gardener's. It is unquestionably more valuable than the Black Currant which is adapted to but a very narrow strip of the country and moreover appreciation of its peculiarly flavored fruit at best is to be considered as an "acquired taste."

The Department of Agriculture "is opposed to the growing of this species of Currant anywhere in the United States, and recommends . . . active steps to accomplish its elimination." Many states already prohibit the interstate movement of Currants of any kind, because of their disease distributing predilections and the Black Currant is the worst offender of the entire family.

A WORD TO THE WISE

THE unprecedented drought that held the country in its grip during the closing period of the year just ended should be carried in memory at the present time, and that memory should stimulate action. Drought in winter is every bit as serious as drought in summer. Hence this word of warning to look well to late summer plantings. See that the mulch is there. Even watering may be needed. There is some tax upon a newly set out plant to deliver moisture to the drying winds when the roots are not able to get adequate supplies from the surrounding ground. This is by way of a word to the wise.

MODERN SERVICE OF INDUSTRY

EACH phase of home making, home beautifying and home decorating is a field of interest that nowadays attracts the activities of the best business minds. Much research work is presented in many ways. One way is by preparing booklets telling of the factory productions and telling you how to use these in your home. These booklets, if sold, would cost many dollars, but they are offered to you free in the advertising pages of your magazine. No matter whether you desire to know how to finish your floors, or about the best rods for your windows, the newest brushes and paints, draperies for your home, or what not, a reference to the advertising pages of your magazine will reveal offers of bulletins that will solve many of your problems. To-day is the day of the reliable manufacturer. Time was when advertising could not be depended upon but to-day if you see it in print in a reputable magazine you can be pretty sure that "it is so."

ALL THE BUGS AREN'T OURS

NEW discoveries of habits of insects are not always disconcerting to the horticulturist alone, although a good many gardeners seem to feel that entomologists are always multiplying the ills that bear upon them. Now comes word from the United States Department of Agriculture of the discovery that a little black beetle about $\frac{5}{16}$ of an inch long has developed a fondness for eating holes in lead covered cables such as are used by the telephone companies. This little beetle normally feeds on the Oak so his new appetite is a partial relief to the horticulturist.

"Nothing seems able to stop its gnawing except steel and nothing seems to be poisonous to him, not even lead, arsenate, copper nicotine sulphate, and numerous other things which are distinctly deterrent to ordinary beetles offer the slightest barrier to this lead borer."

AN EXCHANGE FOR RARE PLANTS

THE difficulty of obtaining odds and ends of little interesting plants while often one of the thorns in the flesh of the keen collector is also one of the most exciting phases of the gardener's hobby. Few who have not experienced the ultimate achievement of success can appreciate the thrill of joy and personal satisfaction that follows the unearthing of some long-sought gem when despair had almost been reached. Of course, it is the same instinct that gives zest to the hunt of antique furniture, old books, china, or whatnot, with the added interest of the fact that the plant hunter is dealing with the vibrant, living thing. That the difficulty of plant collecting is a real one has testimony in the frequent inquiries in our Open Column, and to such interested collectors a letter lately received from the Director of the Harvard University Botanic Garden at Cambridge, Mass., carries a welcome message which we are glad to pass on. The Harvard Botanic Garden is setting itself a great task in making as complete a collection of hardy perennials as time and effort can accomplish, and is desirous of exchanging plants and seeds with garden lovers everywhere for mutual help, and it will welcome any coöperation that our readers can give, in the hope that it too may also serve them. If any reader has special difficulty in obtaining any herbaceous plant, the Harvard Botanic Garden may be able to help.

OPEN CONFESSIONS

THE slip 'twixt the cup and the lip leads all of us unwittingly into many misunderstandings. It is regretted that the lake scene on page 224 of our December number was incorrectly credited. Too late for the alteration to be made we received the advice that the garden where the charming tea house and lake nestles is on the property of Mr. J. L. Carman.

When windows are in two parts, as these casements surmounted by ventilators, the curtains may be adapted to both types. The operation of windows should never be impeded by draperies that defeat their purposes of admitting air and light

CONCERNING WINDOW TREATMENT

ESTELLE H. RIES

Photographs by Thomas Ellison, Mattie Edwards Hewitt, John Wallace Gilles

Draperies, curtains and hangings as factors in harmonizing room furnishings – Different types that fit different window styles

IN PLANNING curtain and drapery arrangements, the question is not one of vogue or current style. The prime considerations are the use of ne room and its proposed furnishings, its exosure to the sun and the kind of window to be reated. Dining-room treatment would logicly differ from library treatment; oak-panelled alls from walls of white enamel; the north utlook from the south. Whether the window an ordinary double-hung, a casement, a bay, r a French type will affect the curtaining. tyle as such has little to do with suitability; ssentially we must deal not with fads but with rinciples.

Not only can the drapery of itself be charmg, but by color and texture it softens the arsh, angular aspect of the room, cheers the plain place, relieves the chill barrenness of an uncurtained chamber, unifies the various furnishings into a pleasing harmony, screens indoor activities from the gaze of passers-by—these and other things are its constant privilege and opportunity.

The purpose of any window of course is to admit air and light, and draperies should be so placed as to permit these functions to go on without undue interference. Operation of the window should not be impeded by its adornment.

IT IS customary for each window to have two sets of curtains, and the man of the house, liking the great outdoors, will perhaps find at least two of these superfluous. But this arrangement is nevertheless based upon utility, and in any case where it lacks good reason, need not be adhered to.

The two sets, of course, have different purposes. The first pair is hung next to the window and its function is to screen the room from the eye of the outsider and to modify the quality of light coming into the room. It is therefore necessary for these glass or sash curtains, as they are called, to be of thin, translucent material that the light readily passes through, with just enough weight to obscure indoor activities from those outside. Among the delightful stuffs available are net, plain lace, scrim, thin silk, casement cloth, mercerized cotton, and the sunfast fabrics.

Since the glass curtains are seen from the outside of the house, a sense of unity is attained if they are alike on each floor. The

glass curtains, further, should be harmonious in texture with the drapery they are to accompany. A simple scrim is appropriate for cretonne, linen, or similar overdrapes, while for the silks and velvets, something finer is required such as net, fine lace, or soft silk. Glass curtains should not reach below the window sill and should be hung so that they may be freely pushed aside. Window shades may be omitted if desired when these are used.

A sunroom furnished largely with flowers requires a crisp pattern in the curtain material to supplement it. The grouping in pairs is given charming emphasis by the gay curtains which are lightly held back to frame the view out of doors

OVERDRAPERIES are quite different as to purpose and treatment. Their chief obligation is with regard to color, for they must play the intermediary between the dark floor, the light walls and the furniture, bringing the entire room into a proper interrelation of its elements. They must be dark enough in value to supplement the richness of the room, but not so dark or so conspicuous in pattern as to stand out strikingly and make the room small and spotty.

Much depends upon the material selected for the overdraperies. Silk mellows the light; gay cretonne contributes a certain cheer and coziness; velour adds richness and warmth. Brocades, damasks, poplins, corded silks, and similar textures are used in connection with light, ornamental, and elaborate French furniture where richness of this sort is required. Period rooms may have conforming curtains, as they are available in suitable reproductions, but the average room is not concerned with these matters. When the furniture is heavy, and especially of the over-stuffed varieties, good wear in drapery materials is had from velour, tapestry, corduroy, and similar effects. When soft, rich color is wanted, velvet strongly commends itself, for its lustrous, silky texture gives cool deep shadows and contrasting high lights that make it always interesting. There are all sorts of velvets—plain, variously striped, and of historic design, as well as inexpensive varieties that are also serviceable.

In selecting hangings for windows and upholstery materials, a relationship must be preserved with the texture of wallpaper. A glossy thin silk in the curtains will not look well with a background of dull coarse burlap paper. Velour in the drapery will not complement chintz on the wall. The material should conform to the other furnishings in richness or simplicity. It is essential that the curtains repeat the colors of the other room furnishings, especially upholstery and floor coverings, lest the windows give isolated spots of color that are not related to the rest of the room. Theirs is the obligation to unite the colors of the room and not permit it to give the effect of separate units.

If pattern is lacking in the room, it may be delightfully employed in the window curtains where it at once gives zest and animation to the surroundings. This curtain is hung so as to increase the apparent size of the window as it is placed beyond the window frame rather than within it

AS FOR the matter of pattern, if the walls are plain it is customary to use either plain or patterned draperies, and the choice will depend upon the quantity of design elsewhere in the room. When pattern is used, a small figure should be selected for small rooms and a larger one for larger rooms. When the walls are themselves patterned, it is safe and restful to have the draperies without pattern. This is not an inviolable rule, but it takes very nice discrimination to furnish a room with as much pattern as this implies. It is not good policy, for instance, to have a tapestry wallpaper, and draperies of the same pattern tapestry. While this would not be inharmonious, it might be extremely monotonous. There is opportunity for just that necessary element of contrast in the draperies, and "matching" things exactly is by no means the last word in good taste, nor is it even desirable.

Draperies should be as far as possible selected from the wide range of sunfast materials to-day available. The cost of purchase is somewhat higher, but the materials are positively guaranteed against fading, rain, and other ills. They keep their freshness, and in the lighter textures may be cleaned at home. They are available both for sash curtains and for heavy overdrapery and up-

holstery material and give really dependable service.

Much can be done to alter defects in the proportion of the room by the proper hanging of the overdraperies, and on the other hand, carelessness will exaggerate them. If the curtains are too long and narrow, the height of the room will be unduly emphasized. If they are too wide or short, the room will look squatty. If the window be small, it is a mistake to cover much of it with the overdrapery, which in this case might better be hung upon or around the window frame rather than inside of it. Windows of considerable architectural beauty, and with frosted or stained glass, or very small window panes and leaded effects do not require any curtains at all since their own beauty should not be concealed, and further because the character of the glass serves the purpose of screening and modifying the light that the curtains would only duplicate.

THE valance is an important accessory both architecturally and decoratively. One that hangs down over the glass shortens the window, but if it be placed above the window, the apparent height will be increased. Where possible, it is desirable to have the valance high, as this permits better ventilation at the top of the window. Valances are not always used, but they are 99 per cent. desirable, since they logically and effectively connect the draperies and make a complete unit of the window group with continous color, rather than a series of vertical lines unfinished by the horizontal top.

Sometimes when plain material is used for the draperies, the valance may be of the same color with a contrasting stripe or figure, and this in turn may be found in a cushion or other piece in the room to make for interrelation without too much pattern.

Whenever a window has a wide sill, this sill forms a suitable stopping place for the drapery. It is usually disagreeable to see it bulge over such an obstruction, or evade it by being pushed alongside.

Since in most cases the window frame is a straight, vertical line, conformity between the window and its drapery is at once established by hanging the drapery straight, and the very simplicity of this arrangement makes it restful and pleasing. When the drapes are looped back, disturbing and complicated lines are created that do not harmonize with the structural character of the window. In cases where it is desired to draw the curtains back, the folds may still hang straight. Side curtains may be loosely held back with cord and tassels, or with "tie-backs" made of the same material without interfering too much with the straightline effect, provided there is no looping up of the curtains in some forced position. The question is justly asked, if we need curtains at all, what is the use of deliberately uncovering the windows again.

WHEN a large window is arched or circular at the top, the over-draperies may be brought together at the upper edge, and instead of hanging straight down and completely hiding the window, may be looped near the top where the curve of the arch stops and the window frame comes down in a vertical line. Thus the sides are in straight folds after all. In other arched windows, an arched valance may be used, and the draperies hung as usual.

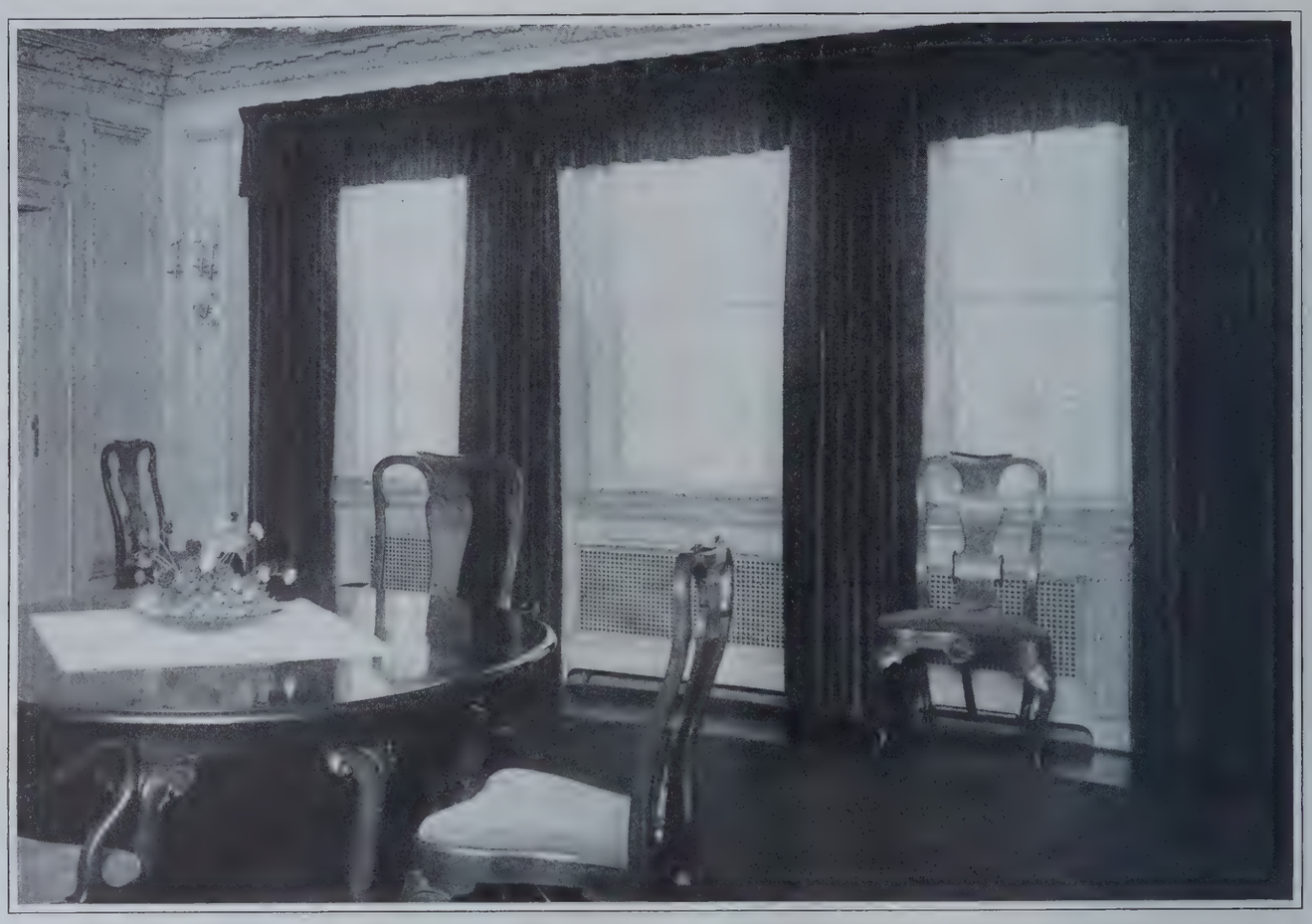
Valances may be made in any desired shape to conform with particular conditions. For low windows they may resolve themselves into simply a narrow straight band. In higher windows they may be proportionately deeper, and may be shaped either to be deepest at the center or at the sides. Often they have a series of even curves all along their lower edge. Or a straight "step" may take the place of curves. The valance may also be shaped to follow the lines of a bay window.

No curtains should actually touch the floor, but may come within an inch or two of it.

Pure white sash curtains should not be chosen to go with ivory woodwork; rather écru or cream. Sash curtains in pale colors are entirely permissible. Indeed the range of sunfast materials in delicate shades makes it quite possible to get effects of sun in dreary rooms, of coolness in glaringly bright rooms, and other desirable modifications of light.

THE selection of lace curtains must also be made with reference to other furnishing accompaniments. The elaborate lace curtain, be it ever so beautiful, may be a work of art, but as a decorative accessory it is not in good taste for the simple room. For the Colonial house there is a charming filet net showing quaint sampler figures that happily supplements the room. For a room with massive furniture with heavy texture, a heavy, coarse-meshed net is fitting. The lower floor of the house, being more formal and heavier, may be treated in more stately manner than the less formal quarters above. Handsome curtains of Irish point, Cluny, and others may be had, and will be best ordinarily if chosen in ivory tones. Lace curtains should not be draped, but should hang simply in straight lines. Where there is a decided pattern corresponding figures must of course be hung opposite each other accurately.

Allowing plenty of space for the opening and closing of the casement windows, these gracefully shirred transparent curtains offer an interesting treatment of such windows in an arch. Without shades this permits plenty of light and at the same time softens what might otherwise be too great a window space. The coloring in the curtains and valance unifies the floors and walls



A popular way of hanging curtains in a series. Without the two vertical lines bordering the center window, this side of the room would look flimsy and light-weight, and would not be in keeping with the rest of the furnishings. The simplicity of line here is restful and pleasing, and variety is had by the lights and shadows in the folds of the drapery

Voile, net, muslin, scrim, poplin, pongee, and light-weight silk are among the standard casement materials. They may simply be edged or just hemstitched, and elaborate designs and trimmings should be avoided. Casement windows are usually equipped with curtains that will draw. It is not necessary for them to have overdraperies, but there is no reason why they may not have them if desired.

The subject as a whole is one that should not be entered into lightly, for the curtains do so much to make the house a home, that consideration should be given to every detail of the selection and hanging in order that the result may be a happy one.

POULTRY MANURE FOR FERTILIZER

POULTRY manure is a most valuable fertilizer, being especially rich in nitrogen.

In the fresh state it contains 50 to 60 per cent. of water, ½ to 1 per cent. of nitrogen, and ½ to ¾ of 1 per cent. of phosphoric acid and potash, but when air-dried, contains about 36 pounds of nitrogen, 24 pounds of phosphoric acid, and 13 pounds of potash per ton. This plant-food is in a readily soluble form and its physical condition, concentration, and quick action make it resemble commercial fertilizer.

If the manure is to retain its fertility, it should be collected regularly and properly taken care of. This necessitates the use of a good absorbent on the dropping boards, or under the perches, and also the prevention of exposure to rain, as the value of the manure is quickly reduced by leaching. Fermentation may also drive off much of the ammonia if the droppings are not dry when collected in bulk.

Poultry droppings can be kept dry by placing them in a large box or storage bin of heavy planking or, better yet, of hollow tile, so constructed that the air will circulate through the mass of droppings. If the amount is limited because of the small number of birds kept, use a covered barrel in which a few holes are bored to admit air.

If 400 pounds of acid phosphate are mixed with 1,600 pounds of dry manure, the mixture will be about equivalent to 1,000 pounds of a 3–8–1 fertilizer states the New Jersey State Experiment Station. This is suitable for corn or almost any crop, and may be applied at the rate of 1,000 pounds to 2,000 pounds per acre either by hand or, if pulverized and screened, with a drill.

PLANNING THE GARDEN FOR CUT FLOWERS

ELIZABETH LEONARD STRANG

Answering the question of how to have flowers in quantity in the garden and abundance for decoration indoors at the same time

WHILE we instinctively visualize a "cutting garden" as one ablaze with annuals, it must also be apparent that to have flowers for cutting at all times we must also include some early bulbs, some perennials, and even some flowering trees and shrubs for the months when the annual blooms not. To be a "good for cutting" flower the plant must have a fairly large bloom or good mass effect; a strong upstanding stem; ability to last well in water; and fragrance.

With these qualifications decided upon, the rest is merely a matter of classifying and tabulating the notes, long cherished, gleaned by actual toil, the sweat of my brow, in garden after garden, year after year.

When I looked over the plans of cut-flower gardens that I have made, and arranged them on the board before me, all drawn to the same scale, I was struck by certain fundamental similarities though each one had a certain individuality. (See accompanying plans.)

Certain details in the growing of the seedlings next came to my attention. When you are doing it year after year it seems so simple to send certain seeds to the greenhouse, others to the hotbed, and to reserve others for sowing in the ground, yet to the beginner it may be far from clear.

Sometimes people do not make the most of the floral material which they have at hand. They desire a bushel of this or a barrel of that, and complain bitterly if in any one week the garden is unequal to the occasion. Some prefer lavish masses of palest sulphur Iris, pale blue Larkspur, or shell-pink Peonies. Others, with the discrimination of a Galsworthy flower painting, throw together with seeming carelessness such telling combinations as cerise Phlox, orange Lilies, and Veronica of cobalt-blue, with an effect of richness like a stained-glass window. Let us then classify the material to use.

A COLORFUL BORDER IN A LITTLE CITY GARDEN

By massing together the flowers of one kind the border can be drawn upon freely for cut flowers without detracting from the outdoor picture. (Foxgloves and Sweet-williams, with Funkia in foreground)

THE VERY BEST CUT FLOWERS

Those plants which stood the severest test—which gave a succession of bloom, in sufficient quantity, in a space so limited that it could not waste an inch on an unworthy flower—are the following:

Perennials
Large-trumpet Daffodils
Darwin Tulips
Iris
Columbines (pink vulgaris and chrysantha)
Pyrethrum
Peonies
Foxgloves (a few)
Hardy Carnations
Larkspur
Lilies (many kinds)
Shasta Daisy
Japanese Iris
Roses
Phlox (but little, as it drops)
Helenium
Hardy Chrysanthemums
Stocks
Lavatera
Scabiosa
Calendula
Marigold (if one likes odor)
Dahlias
Gladiolus
Cosmos

Contrasting or Subsidiary
Meadow Rue
Astilbe (pink or white)
Spiraea filipendula
Achillea Pearl
Galium mollugo
Gypsophila
Statice
Eupatorium ageratoides
Artemesia lactiflora
Boltonia asteroides
Hay-scented Fern

Annuals
Asters (they sometimes blight)
Zinnia
Larkspur
Snapdragon (blights sometimes)

Some Few Shrubs
Forsythia
Pussy Willow
Magnolia
Lilac
Deutzia
Hydrangea Hills-of-Snow
Sweet Pepperbush
Buddleia

That is an extremely conservative list; planned for the most exacting. It is for the kind of a garden the busy business man, who merely wants "results" from the garden, might have.

FLOWERS WITH FRAGRANCE

In making a list of sweet-smelling flowers the year around one notes that many dear old favorites are included, as though odor entwined itself more closely in the affections than color or form.

Spring
Hyacinths
Narcissus poetaz
Violets
Lily-of-the-valley
Iris florentina
Iris William III, (late dark purple)
Lemon-lilies
Lilacs
Strawberry-shrub (Calycanthus)
Tulips, notably Gesneriana lutea, pale yellow; Mattia, rosy carmine; La Merveille, orange flushed rose
Clove Pinks
Fraxinella
Honeysuckle

Summer
Peonies, including (among very many): Octavie Demay, pink; Madame Emil Lemoine, flesh; Duchesse de Nemours, sulphur-white
Mockorange (Philadelphus)
Flowering Currant
Roses
Funkia subcordata grandiflora
Phlox (faintly fragrant)
Lilies (especially speciosum)
Thyme (aromatic)
Mint (aromatic)
Lavender
Hardy Carnations

Annuals
Heliotrope
Stock (especially Night-scented)
Rose Geranium
Lemon-verbena
Mexican tuberoses
Mignonette
Mayflower Verbena
Nasturtium

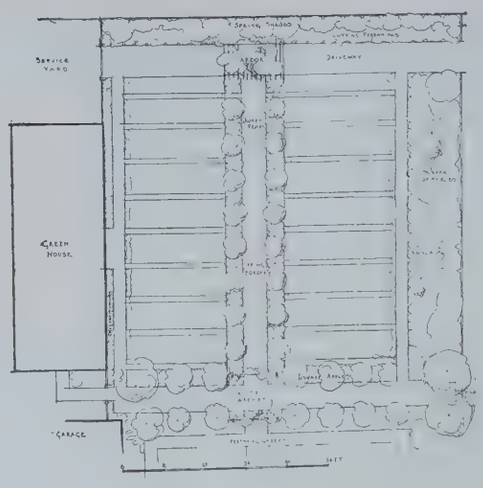
THE BEST PERENNIALS

When planting any herbaceous perennial border the gardener should avail himself of the opportunity to gather together the best-named varieties of each—if in these days there may be said to be any "bests" when so many good things are offered. It is just as much work to grow poor varieties as really good ones. The rather obviously best thing, pure color, is emphasized in one subjoined list and in the other are the varieties of more unusual, more subtle, qualifications which will serve those who have travelled somewhat along the road of plant appreciation.

NICE ENOUGH TO GROW BY THE BUSHEL

NARCISSUS, Large-trumpet.—Emperor, all yellow, 20". Empress, bicolor, 18". Van Waveren's Giant, primrose and bright yellow, 17". Weardale Perfection, sulphur and white, 22". Madame de Graaf, almost white, 15".

EARLY TULIPS—Flamingo, American Beauty pink, white stripe, 13". Chrysolora, pure golden yellow, 12". Lady Boreel, glistening white, the BEST, 14".



No. 1.—THE CITY GARDEN

Annuals and perennials combined in restricted space; calls for real skill in arrangement to keep the garden also pretty in itself

MAYFLOWERING TULIPS—clear colors, 24"–30". Madame Krelage, silvery rose. Clara Butt, an old favorite pink. Louise de la Vallière, very clear bright cherry rose. Dream, pale heliotrope, darker flush. Marconi, immense deep violet-purple. Moonlight, luminous canary-yellow.

IRIS—pure clear colors, lighting up well out of doors and in Pallida speciosa, THE BEST, large light lavender, 3'–4'. Flavescens, palest straw yellow 30". Aurea, soft deep yellow 24". Diane, lavender, very free flowering 23". Fairy, translucent white, 30". Queen of May, orchid-pink, 24". Kochi, early, rich black-purple, 24".

PEONIES—*Early double:* Officinalis rosea plena, very old-fashioned early pink. Umbellata rosea, creamy pink. *Early single:* Areos, delicate pink changing lighter. Rosy Dawn, tinted pink changing to pure white. Mrs. Key, deep black-maroon, good with sulphur yellow. *Midseason double:* Duchesse de Nemours, sulphur-white. Festiva maxima, the VERY BEST, white, crimson flecks. Marie Jacquin, called the pond-lily peony, flesh-pointed petals. *Late:* Couronne d'Or, pure white with golden stamens. Madame Emil Galee, pale hydrangea-pink. Rubra superba, dark deep crimson.

ROSES—Madame Edouard Herriot—coppery coral-red shaded yellow to scarlet. Los Angeles, flame-pink to coral, shaded yellow at base of petals. Lady Ursula, clean flesh-pink. Madame Caroline Testout, satiny rose, broad petals. Hadley, a deep red which everyone wants. Baby Cecile Brunner, for very late and also Baby Tausendschon.

A SECOND CHOICE

PHLOX—Though the petals drop we must include some varieties for effective color mass. Miss Lingard—early white. Elizabeth Campbell, clear salmon-pink, light pink eye. Selma, clear pink red eye. Rynstroom, the best deep rose. R. P. Struthers, vivid coral red. Baron von Dedem, blood-red.

LILIES—Candidum, white, fragrant, July. Hansoni, thick, waxy, golden, July. Regale, white, flushed canary and pink, July. Auratum, the big gold-banded lily, August. Speciosum, both pink and white, fragrant, August and September.

DAHLIAS—Why try more merely for cut flowers when these two are so good and so cheap. Pink Pearl: bright pink cactus. Lemon King: peony-flowered yellow.

GLADIOLUS—Myrtle, the BEST clear even pink. Mrs. Francis King, flame. Niagara, clear soft yellow. Sulphur King, deeper yellow. Lily Lehman, glistening white, with hint of pink on tips. Empress of India, rich dark red.

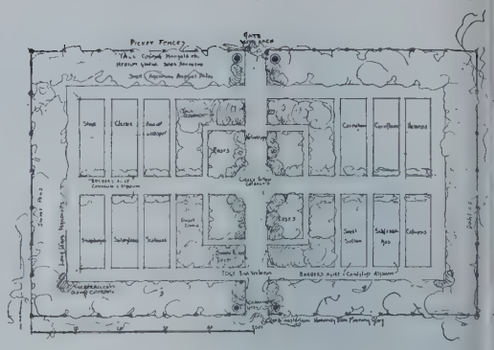
CHRYSANTHEMUMS—for the hardy garden. Edna, large creamy white. Excelsior, large yellow. Lillian Doty, large shell-pink. Baby, golden button which everyone *has* to have. Brown Bessie, mahogany-brown button which is likewise indispensable.

THE MORE SUBTLE VARIETIES

NARCISSUS, the daintier sorts.—Poetaz hybrids, short-cupped, deep yellow fragrant clusters, 20". Alba plena odorata, double white like a gardenia. Poeticus ornatus, the single form, white with orange-red cup. Sulphur Phoenix, double white and sulphur. Barri conspicuus, pale yellow, orange cup, 21". Mrs. Langtry, white perianth, primrose cup, 16". Will Scarlett, creamy perianth, dazzling orange-scarlet cup, 18".

EARLY TULIPS, the double ones are more unusual.—Safrano, Tea Rose; soft pale yellow tinted rose, 11". Murillo, rose-pink flushed white, the well-known forcing one. The Pearl; a most unusual single, pale heliotrope flushed white at base, 12".

MAY-FLOWERING TULIPS, beautiful soft tones and combinations. Marconi, immense violet-purple. Suzon, soft buff-rose. The Fawn, pale rosy fawn changing to cream, flushed blush-rose. Mauve Clair, soft lilac-mauve. Fulgens lutea pallida, palest straw yellow. Chestnut, mahogany-brown with purplish bloom. Madras, sparkling heliotrope and gold. Mrs. Stanley, silvery cool rose. Flamingo, clear soft shell-pink. Centenaire, rich violet-rose with a blue base. Orange King, glistening deep orange shaded rose. John Ruskin, salmon-rose, golden flush, egg-shaped. Marie Louise, old-rose flushed orange, button-shaped. Madame Lethierry



No. 2.—THE COUNTRY GARDEN

With plenty of space, and a perennial garden elsewhere, reliance is put on solid beds of annuals

crushed strawberry edged warm pink. Turenne, lavender, gold, and pinkish violet. Le Mogul, lavender-mauve, white base, transition from the pinks. Dal Ongaro, warm lavender-violet. Louis XIV, immense dark purple-bronze *everyone* wants it. Rembrandts, feathered and splashed lilac, white, old-rose.

IRIS, would include some of varied tones, yet not necessarily the most expensive.—Loreley, light yellow standards splashed with the dark purple of the falls, 30". Florentine, pearly tints lovely with Tulips, 24". Dorothea, pearl gray flushed verbena-violet, 18". Demure, blend of madder, rose and copper, 27". Princess Victoria Louise, standard yellow, falls violet, 30". Victorine, white and velvety pansy-purple, 24". Prosper Laugier, light cinnamon-drab with a pinkish sheen, 3'. Madame Chereau, white with edges feathered violet 3'. Sibirica orientalis, deepest pale blue. Mrs. Neubronner, deep golden yellow, good with above.

PEONIES—*Early single:* tenuifolia, species with deep crimson petals, golden stamens, fern-like foliage. Lutea, species, half shrubby, single, deep buttercup yellow. *Midseason double:* James Kelway, white, golden glow at base of petals, very fragrant. Avalanche, white, sometimes a crimson touch, fragrant. *Late double:* Gismonda, creamy white with rosy light, fragrant. Grandiflora (Richardson) large flat flowers of silvery shell-pink, pointed petals, fragrant. Solange, indescribable lilac to salmon, like a sunset sky, expensive.

ROSES—Irish Fireflame, large single, old-gold. Emma Wright, distinct, clear orange. Templar, an excellent new red.

PHLOX—The Blue Hill, deep true iris-purple. Madame Paul.

A COUNTRY FLOWER GARDEN

In such an informal setting one's fancies for any kind of flower can easily be indulged

A SEASHORE GARDEN

The annuals, hardy and tender, are largely relied upon, in this south shore Long Island garden. Protection from the ocean breeze is obtained by the high hedge of Privet

Dutrie, orchid-pink, ties violet to pink. Eugene Danzenvilliers, lavender. Cameron, apple-blossom-pink.

LILIES—Browni, very permanent, pale lemon, outside streaked with chocolate, June and July. Elegans, var. Batemanni, apricot-yellow, August. Krameri, 6" blooms of soft pink, July. Canadense var. flavum, nodding wild orange lily, slender graceful. Henryi, called the orange speciosum, tall, August.

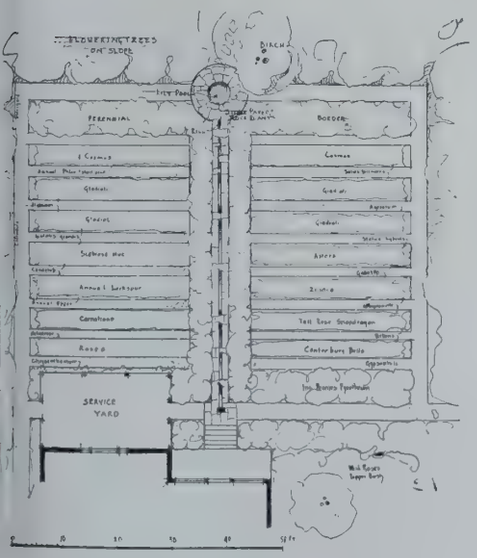
DAHLIAS—To name but a few examples of some unusual shades. Mrs. Ashley Lowe, rich deep orange cactus. Sunkist, orange-pink peony-flowered. Ruth Gleadell, yellow amber and pink cactus. The Millionaire, pinky lavender-mauve, expensive.

GLADIOLUS—here again there are many. Primulinus hybrids, small graceful flowers with a range of citron, apricot, orange, cream and buff tints. Mrs. Frank Pendleton, light pink splotched blood-red. Pink Wonder, light pink, corn-yellow base, feathered-rose.

CHRYSANTHEMUMS—Gaiety Single, large bronze single, not very hardy. Dinzulu, large soft pink. Xenobia, soft tone of orange. King Philip, late deep pink.

ANNUALS WORTH SPECIAL MENTION

Zinnia, Dwarf Double salmon-rose; Scabiosa Azure Fairy; Petunia Rosy Morn; Annual Larkspur Newport Pink; Nigella Miss Jekyll; Shirley Poppy Wild Rose Pink; Double Poppy White Swan; Sutton's Giant Ray Asters; Calendula, Orange King, Lemon King, and Nankeen; Asters Peerless Pink, Violet King, Sensation (red).



No. 3.—THE SEASHORE GARDEN

On a level sheltered spot behind the house designed for pictorial effect during the summer season. Rock plants introduced between the stones of walk and pool

DESIGN IN THE CUT-FLOWER GARDEN

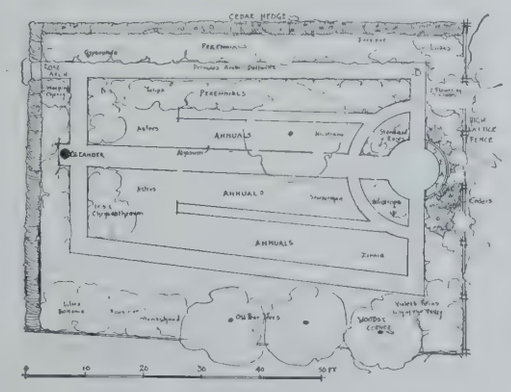
In general we need not strive to create a picture for its own sake when the object is to get blooms to cut. Therefore, in the simplest manner possible, the flowers may be arranged in blocks, each kind by itself, in beds whose size is convenient of access, with service walks as narrow as possible to economize space. A bed may be from four to six feet wide; a service walk one to two feet, though the main walks are of course wider. Now for giving it individuality.

1. The City Garden

Plan No. 1, shows a perennial border down the center of the garden, with accents of dwarf Pear trees, rose arches, and a terminal arbor. Such a border may be built up without expense by using the overflow from the main garden, and the once-used bulbs which are almost a necessity if the cut-flower garden is to be enjoyed in the spring. Where it is not possible to set aside definite space for the annual or cutting garden, one may practise a system of filling in among the perennials. It produces a greater effect of bloom, but of course calls for more brains and work, since it needs an artistic eye rarely possessed by the chore man. Cosmos, Marigolds, Zinnias, Gladiolus, Calendulas, may be inserted in the background; Ageratum, Tagetes and Candytuft in the front. Avoid a spotty effect by planting from six to a dozen in each place. Poppies may be sown among the Iris. Pansies and Annual Phlox may grow up through the Gypsophila—these expedients help to make the border colorful.

2. The Country Garden

The outstanding feature of plan No. 2, aside from the picket fence designed to keep out dogs and cattle, is its glorious emptiness, doubly appreciated by any one who has been faced with the "tucking-in" system just described. Not being needed before the time of annuals, and having a perennial garden elsewhere, it is therefore (with the exception of a few beds filled with Roses), devoted entirely to annuals. In some places the Poppies, Calliopsis and Cornflowers come up without assistance, but otherwise there is a clean sweep each year. Because of the scarcity of trained help the method of filling the garden is simple in the extreme. Certain seeds



No. 4.—THE OLD-FASHIONED GARDEN

An atmosphere of age is retained by lattice screen and old trees for a background in this Plymouth, Mass. garden. Annuals and perennials are grouped together in irregular masses with much reliance on shrubs for bloom

(see lists to be given later) are sent in February to a near-by greenhouse. Others are planted in hotbeds and then some day in early June, I take the paper plan, and with all hands, we make a day of it. A truck arrives from the greenhouse loaded with "flats"; we send to the hotbed for plants as they are needed; and ever so many seeds are sown, either in square blocks or long drills, as being easier of cultivation than the intricate irregular patches sometimes shown on plans. In a garden handled as this must be, an involved plan is impossible. We do put the taller things at the back, but that is as far as it goes. There are no inharmonious colors admitted, so that point is no trouble. But results are "the one thing we do have plenty of." The ground is plowed and harrowed as for a field crop, and top-dressed with bone meal and fine hen manure. Then the flowers leap out of the ground, until in September it is a harmonious mass effective in its very simplicity.

3. The Seashore Garden

Plan No. 3 suggests a garden for the seashore, tucked in a level sheltered spot behind a cottage. As it is the only garden, a pictorial effect was desired. With this in mind it is framed with native flowering trees and shrubs; Cedars, Beach Plum, wild Roses and Pepperbush. Perennial borders furnish flowers for early summer, and down the center flows a rill in an artificial channel of concrete cleverly masked by flat stones and creeping rock plants, so difficult to put into the usual garden. No spring bulbs are needed but great stress is laid on good Roses and Lilies, and Gladiolus.

4. The Old Fashioned Garden

Plan No. 4 shows a garden that started out to be an "old-fashioned" garden tucked away in an angle behind the lovely old Boxwood parterre in Plymouth, Massachusetts. But, space being at a premium, some features were modified to make room for still more annuals. A high lattice screen and fine old trees—such a perfect background—were left untouched, and the perennial borders put around the outside. The flowering Crabs, Lilacs, and Cedars, and the little woodsy corner under the old Pear trees, were with sorrow torn away to make beds full of emptiness for Snapdragons and Zinnias. The seeds for this garden are each year given to a local greenhouse. The owner has neither space nor patience for a hotbed or any broadcasting of seeds. An annual rite soon after Memorial Day is the setting out of the plants from the greenhouse. Figured at 4 cents apiece the bill used to run around $40.

THE OLD-FASHIONED GARDEN

Convention prescribes that the old-fashioned garden shall be informal and irregular, truly a place "to cut and come again"

COMMON SENSE WITH THE VEGETABLE GARDEN PLAN

JOSEPH HENRY SPERRY

TO THE experienced and the amateur gardener alike, January brings opportunity of approaching the garden problem in a leisurely way both practical and pleasing. The mistakes of last year stand out with startling clearness and the rush and pressure of the spring work have not as yet arrived.

Into this leisure time the seed catalogues are dropped,—gay-colored garden pictures, each with the new varieties and old favorites so alluringly presented that one forgets that the garden is asleep beneath the snow and longs to start work at once. And there *is* work to be done now—important work—necessary work—only it must be wrought with pencil and paper in lieu of shovel and hoe.

This is the making of a plan, deciding on the seeds wanted and ordering them *at once*. Not to-morrow or next month, but *now*.

ONCE, when we knew very little about gardening, we gloated over our catalogues, checking, as we read, the kinds of plants we wanted. From this checking we made long lists of seeds to be purchased. Along about April we'd either mail the order to the nurserymen and seedsmen or carry it in ourselves, only to find that most of the choicest varieties of those decided on were sold out. We'd get enough to work with, however, and spring having arrived we'd begin at one end of the garden, make and drill holes and bury seeds in them. That word describes our too often thoughtless efforts. We felt that we had done our work if we simply got the seeds under ground. If some of them were buried so deep that they never succeeded in struggling up through the soil and others were

covered so slightly that the rain washed them out, we had a general feeling that the vegetable seeds had failed us and that they had very stubborn dispositions.

As our planting drew near the other end of the garden, how often we found to our dismay that we had used nearly all of our garden ground! What were we to do? Must we leave unplanted those vegetables which we liked best? Should we divide the small remaining space among all the varieties of seeds we had left?

No matter what our decision, we know as we look back that the failure of our garden after all was not the fault of the seeds—but in the lack of a plan.

And so this year my garden has one for I have learned that a garden without one is like a ship without a rudder,—it may arrive somewhere but not at the port it started for.

WITH the exact measurement of the length and breadth of the plot on paper, I made a diagram of the garden on a scale of one-eighth or one-quarter inch to the foot. At the middle point in the boundary lines, I marked the points of the compass, putting in the paths, deciding where we were going to put a fence or plant shrubbery to keep out stray animals and indicating the placement of the garden gates at the ends of the main path.

The plan, which so far showed only the boundaries, paths, and gateways, was then laid aside and a duplicate made.

On this I marked out by scale rows for each variety of vegetable, having the rows extending north and south to admit as much sunlight as possible, making and remaking this diagram until I had a well-proportioned garden. This assignment of space was then carefully marked out on the first plan.

I shall not wait until April this year to order the seeds! The order goes in January and the middle of February will see them safe in my seed basket as my order will be promptly filled since I have done my part by getting it in early.

* * *

To me—in my garden chair, spring has come again, and it is time to begin work. What matter that the snow whirls outside my window. With plans made and seeds ordered is not January given us to dream garden dreams?

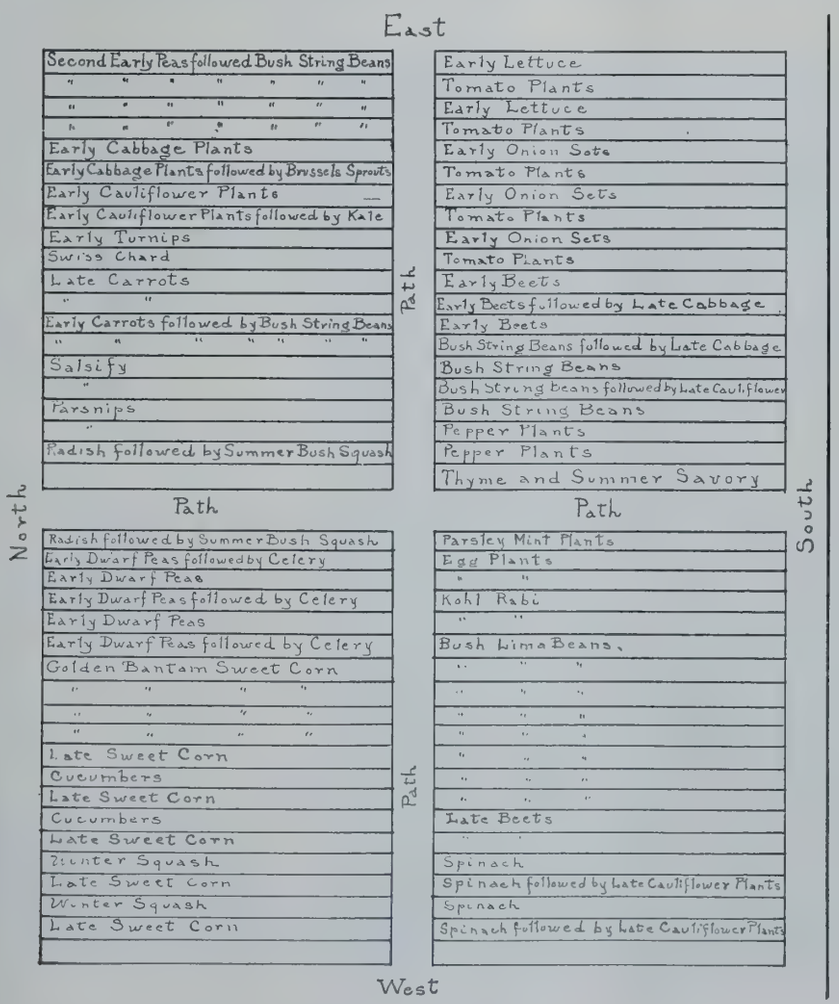
I spade my garden deep, working in well stable manure or the pulverized or shredded manure which I buy in bags from our seedsman, and I pulverize the soil by striking every spadeful I throw up with the back of our spade or spading fork. If I employ a laborer to do this work, I watch him closely to see that he does the work in the approved way. Next I apply on the surface enough of some high-grade well-balanced chemical fertilizer, which I buy of our seedsman, to color well the surface, and rake it in and make the garden level at the same time. This chemical fertilizer stimulates the young plants in the early stages of their growth and the animal manures which were dug in carry on the crops to maturity. Now, time to plant the seeds, not all in one day, but at the proper season; some very early, e.g. Peas and Beets, etc.; others later, e.g. Squashes, Cucumbers, and Lima Beans, and Sweet Corn, in drills or rows which we have marked out in the garden, exactly according to the plan made on paper.

As soon as the plants are above ground, I begin to cultivate not alone to destroy weeds, but to keep the surface soil as fine as dust. If the soil be kept in this condition, there will be little need of watering.

WHEN the first crop is harvested early enough, I spade, and fertilize and rake the ground again and plant seeds for a second crop. Indeed I am able to raise two crops on nearly every part of the garden.

I destroy all insects, as soon as they appear, with insecticides, applied with sprayer or powder guns all of which are bought of the seedsmen. I do not wait to see whether the insects will do harm, I assume that they will. As regards diseases, vigorous growing vegetable plants are almost impervious but in case of most diseases spraying with bordeaux is the remedy.

What results do I obtain from my orderly arranged well-tilled garden? From early May, when the first radishes are pulled, throughout the summer, and the autumn till heavy frosts come, a variety of good vegetables in abundance for daily consumption. Furthermore we have the unselfish pleasure of presenting vegetables to our friends who have no gardens. This is not all; we even extend our vegetable season into mid-winter by canning our surplus crops of tomatoes, beans, peas, sweet corn, etc. To crown all there comes to us a pardonable pride which arises from feeling first, that we are members of that profession to which we are told that the first man belonged; we are gardeners; and secondly, and still more important, that we have joined the ranks of producers and are no longer merely users or handlers of what others produce.



Some Working Details for the Kitchen Garden Plan

1. All rows are 18 inches apart, but when a vegetable is harvested early enough it is either followed by another planted in the same place as in the case of early dwarf Peas followed by Celery or early Carrots followed by Bush String Beans, or the space is left vacant so that the later vegetable standing each side of it, and needing more room will be left 3 feet apart, as in the case of the Tomato plants after the Lettuce is harvested.

2. In the case of such vegetables as Parsnips, Salsify, Swiss Chard and some others two crops cannot be grown in the same place in one season, as such crops require the space throughout the season

3. Winter Squash and Cucumbers need not be planted between the rows of late sweet corn till about June 10, by which date the Corn will attain considerable size and so keep all the time above the winter squash vines when they begin to grow rapidly

4. When the word "plants" is used in the garden plan it is to indicate that this vegetable (for example Cabbage, Tomato etc.) is grown from plants transplanted into the garden and not from seeds sown there directly

AN ILLINOIS HOME IN THE COLONIAL MANNER

Residence of

Mr.

WALLACE GILL

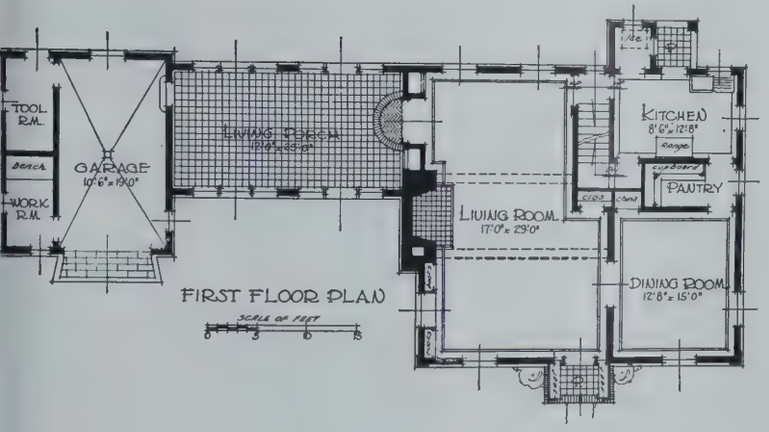
at

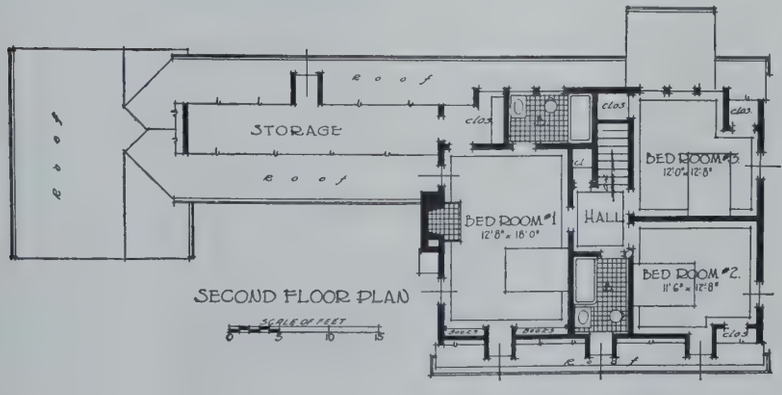
Glencoe, Illinois

R. C. HUNTER & BRO.
Architects

The detail of the interior carries out the spirit of the whole; the simple, mantel treatment, built-in bookcases, beams, and subdued mouldings all contribute to the restful effect of this pleasant living room

Simplicity of line and an air of livableness stamp this modern adaptation of the Colonial as a worthy descendant of distinguished forebears, and this style of architecture seems to belong as happily to the newer environment as to old New England





The design of the doorway (see also upper picture) is particularly interesting and the slat-backed benches, light yet substantial, add a most inviting touch

POSSIBILITIES OF THE PAINT POT

HENRY WANGNER

Photographs by courtesy of the Wooster Brush Co.

Health and better dispositions, as well as new colors, often lie hidden in a can of paint.—Brushes to fit the job.

IF EACH home maker understood the health-value of harmonious surroundings, of tasteful, restful colors in walls, woodwork, and furniture, there would be a marked improvement in the nervous condition of many a household. The effect of colors on our health is not as yet so well understood by the average person as it should be. Nor do they know what magic can lie in a can of paint and a paint brush!

To paint drab walls a light pleasant color, to turn somber-looking woodwork into white is to make a lifeless room into one that is cheerful and filled with charm! And, incidentally, it will have a noticeable effect upon the happiness and health of its inmates.

Just now, it would seem as though the whole world demands and desires bright colors. Never were draperies so gay or hangings and furnishings more colorful and never have manufacturers and designers offered such free aid with all home-making problems as now. It would seem as if there should not be an inharmonious, dull-colored room left.

COLOR is one of the least expensive factors in decoration as well as being one of the most effective. But color must be used advisedly. It is one thing to want to brighten our rooms, to redecorate our walls and furniture with colors that blend, and quite another to believe that any gay color is the touch needed! While dull and gloomy colors make dull and gloomy beings, glaring, jarring colors make jarring tempers. One famous neurologist cures many of his patients by color alone, putting them in rooms decorated in soothing, softly blended tones.

In deciding to use the paint-pot, therefore, walk cautiously as to color and then observe some very simple rules.

First, get only a reliable brand of paint, varnish, or enamel. Most high-class manufacturers nowadays, maintain a special Service Department where you may secure books and pamphlets giving explicit and reliable directions for refinishing and redecorating with their products. They will also solve your own special problems if you will write to them and many will send color charts and helpful suggestions and "pointers."

Importance of Brushes

THE next step is to buy suitable brushes. You cannot use a varnish brush to paint a floor nor a soiled brush for varnishing. The tendency of most amateurs is to get brushes too small and it is as well to get your dealer to advise you just what brush is best for the particular work you are planning.

Many householders become disgusted and obtain poor results on their first job of home painting or varnishing principally on account of the fact that some retailer's clerk has sold them a brush which is not at all suited for the purpose to which they will put it or else the householder expects to get a good brush for about 25 cents. There has been much publicity on purchasing good paints and varnishes, but little mention has ever been made of the brush. No paint or varnish is good paint or varnish unless it is applied with a good brush. In this day and age everyone gets just about what they pay for, and brushes are no exception. The average householder would not expect to buy a good saw for 50 cents or a good wrench for a quarter or any other tool that would give him a fair degree of service. Neither can a good brush be bought for the prices which householders usually think they should and do pay for them. We admit that this condition is principally due to the fact that the householder has never been told about brushes, but paint and varnish brushes are just like any other tool, and it is possible to buy them from 10 cents to $20.00 each. The quality of work which they will produce is practically always in direct ratio to the price paid. More brushes are thrown away than are ever worn out. Therefore, our suggestion is to buy a good brush and take care of it, and the home painting jobs will show a decided improvement.

For the average odd job of painting or varnishing about the house such as re-finishing a chair or varnishing the kitchen floor a small brush which would cost from $1.00 to $1.25 should be used. For larger work such as outside painting, the type of brush which the householder should use to obtain the best results would cost from $2.50 to $3.00.

Care of Brushes

THE third step is the care of your brushes. Brushes must be kept soft and *clean*. Always clean after using by dipping in turpentine and wiping with a cloth. Paint brushes suspended in water keep soft and the bristles remain straight indefinitely. To suspend them, the best way is to bore a small hole in the brush handle and insert a piece of stiff wire. Three or four brushes can be hung on this same wire, the brushes being immersed in the water with the wire resting on the edge of the can.

Varnish or enamel brushes should be hung in oil or turpentine. All brushes must be cleaned with turpentine before and after using.

HAVING selected your finishing material whether paint, enamel, or varnish—one point to remember is that nearly all of these are very apt to have grown thick in the can from standing. If used in this condition, the finish would most likely be "smeary." Be sure to stir the paint or enamel thoroughly before using. If too thick, add a small quantity of turpentine. Never add linseed oil to ready-mixed paint unless for outdoor use, as it will remain sticky for a very long time. Paint should be of the consistency of thin cream and should run freely from the brush. Enamel should be like thick cream and varnish should be thin enough to run freely from the brush. One point to remember is that in the case of enamel or varnish, turpentine will deaden the gloss if too much is used.

In all cases, two or three light coats of paint are better than one heavy coat—the light coats making a smoother, more even coating.

In redecorating furniture, it must be understood that this is not to be a hurried job. You cannot take a chair for instance, where the color has turned white along the arms and just "touch it up" a little with new paint or enamel or varnish. If you do, your chair will have a "patch" on it.

Steps In Refinishing

THE first step, in nearly every case, particularly where the piece of furniture or woodwork has been badly damaged, is to remove the old finish. For this, there are any number of reliable paint and varnish removers on the market. When you decide (or your dealer decides for you) on the brand of refinishing material you are to use, buy this firm's paint or varnish remover and follow directions.

After the old finish has been removed, remember that the surface must be *smooth* before the new coat is applied. To attain this smooth surface, rub with OO sandpaper—a coarser sandpaper will only scratch the surface.

Before varnishing furniture, a first coat of oil stain of the desired color must be applied. This must dry thoroughly, then the coat of clear varnish or a coat of good varnish stain is to be used. The requirements for a good varnishing job are a warm room as nearly dust-free as possible, just the proper amount of varnish used, as little brushing as possible and a smooth, clean groundwork to start with. All of these, the amateur decorator may have by just taking pains and he will learn how to

lo good work with each fresh stroke of the rush.

Two coats of varnish are usually necessary or a perfect finish. When thoroughly dry, where a dull finish is desired, use pulverized umice stone and crude oil. Take a piece of elt (an old felt hat is excellent for this) ip this into the oil, then into the pumice tone and rub the furniture smoothly and venly with this until the desired effect is ecured.

In varnishing, staining, or enamelling a chair r table, begin by turning it upside down nd doing the inaccessible parts, as the inside f the legs and rungs. By doing these first, ou will not have to reach in past wet paint ith consequent damage to both furniture and othes. Varnish or enamel should be brushed s little as possible. For instance—a panel a dresser:—do not begin in the middle of the anel, do all the corners first, apply an even oat, brushing as little as possible, "flowing ie enamel on" as the decorators say. Now o the frame surrounding the panel; then go ack to the panel and "pick up" the varnish enamel by brushing lightly in one direction, ther from side to side or from top to bottom. fter each stroke, wipe out the brush on the dge of the can to get rid of any surplus ma- rial. Pay especial attention to edges and rners where the finish is apt to collect and ck up as directed above. All parts must be one in this manner, watching the newly fin- ied parts carefully until it has "set." here too much varnish has been used or here it has accumulated, there will be "runs" d these must be picked up by light, quick rokes of the brush.

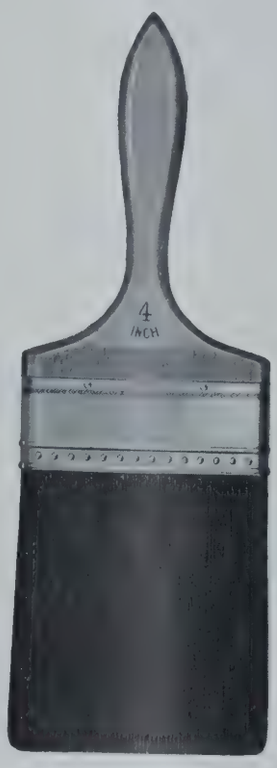
A new type of brush that will prevent that tired feeling when painting by relieving wrist strain

VARNISH and enamel require bout the same eatment in apply- g and can act just "cussed." Until et" each will form ves and dribbles d "tears" which ust be caught hile still soft ough to brush out. member to wipe e brush off on the n after each oke; *this trifle is portant.*

In rubbing as di- ted above for a ll finish, rub first oss the grain of e wood and then gthwise until the sired gloss ap- ars. Clean off the oil and pumice stone h dry cheesecloth. To give a dull finish enamel, rub with felt, pumice stone, and ter.

n enamelling, the enamel must never be plied to bare wood, Always use a first coat some flat finish. Two coats will generally necessary to secure the color you desire. Allow each coat to dry thoroughly before applying the next, sandpapering lightly when dry, then dusting thoroughly. Apply enamel with quick, light strokes. Enamel thickens under the brush and if you go over the surface again and again it will have a "lumpy" appearance.

One factor must be taken into consideration when doing any enamelling and that is the weather. Try to select a dry day if possible. Do not have doors and windows open to permit of sudden drafts. This lowers the temperature of the room and causes moisture to gather on the enamelled surface. If it be necessary to do this work in rainy weather, keep doors and windows closed and have heat in the room sufficient to keep the temperature at an even degree. A small oil stove is excellent for this. When the surface of the enamel is dry, then moisture will make no difference.



A good brush makes the paint flow on easier. This flat brush is suitable for paint or varnish

A chisel bristle brush for the finest varnishing or enameling

To reënamel a white iron bed badly chipped: —remove all of the old enamel with an enamel remover, then sandpaper with OO paper until the surface is smooth. Dust and apply a coat of flat paint in the shade wanted; let this dry, sandpaper it, dust off and apply a second coat, again sandpapering and dusting. It is now ready for the enamel. Remember the directions about doing the inaccessible parts first and in picking up the "tears." Allow to dry and rub if a dull finish is desired.

For painted furniture: remove all the old finish if it be chipped. If not, just sandpaper until smooth. Dust off and apply the paint, two coats usually being sufficient. What is known as a "gloss" paint is generally the best to use as ordinary oil paint would be apt to be sticky. If when finished, the gloss be too high, rub down very lightly with pumice stone and water.

For refinishing old floors, there are several methods, each equally good. For this work, the same steps must be taken as for furniture. The old finish must be removed with a varnish remover and the floors be sandpapered. Where they are badly stained or discolored, they frequently have to be scraped (a scraper can be purchased at any hardware store for about $1.00). If any grease spots remain, these should be cleaned with turpentine, then sandpapered again. All floors must be free from grease or dirt before attempting to refinish them.

It is rarely wise to use water to effect this cleaning. Water warps the wood, opens the seams, raises the grain, besides giving a greyish cast to the wood. After the floors have been cleaned, sandpapered, and dusted off, apply some good filler. Do not use a liquid filler nor use putty, as this dries up and makes a poor job. Smooth the filler off and allow to dry. The floor may now be finished simply by waxing with a reliable floor wax. This gives a soft, attractive finish, bringing out the natural beauty of the wood without any stain.

A small oval brush for jobs needing especial care

Where—however—some particular tint is desired, a good stain may be applied to the floor before using the filler. After filling and staining, apply a very thin coat of shellac diluted 50 per cent. with denatured alcohol. This "binds" the stain. When dry, two coats of wax make a soft, durable finish.

A VERY cheap finish for an old floor in a shack or camp is made by using dry burnt umber and mixing it with kerosene oil to the desired shade. Put on the floor, allow to dry, and then rub with crude oil. This makes a satisfactory finish for old floors that would not repay good work and materials and where the cheapest possible finish is desired. The rough walls of a summer camp may be finished with this and it is suitable for plaster, also.

Where a new oak floor is to be varnished, a filler should be used. When the filler is set, it should be wiped off across the grain of the wood with some coarse material such as burlap. Allow 24 hours for this filler to dry, then it is ready to be sandpapered, dusted and the first coat of varnish applied. Three coats of varnish should be used for a perfect piece of work, allowing 24 hours to each coat for drying, sandpapering, and dusting each coat before applying the next.

All of this work requires time and patience but there is nothing about it that need prevent an amateur from securing good results.

THE SMALL HOUSE ON THE LITTLE LOT

LOUTREL W. BRIGGS, Landscape Architect

Instructor at the New York School of Fine and Applied Arts

THE FIVE COMMON THOUGHTLESS MISTAKES

1. Thoughtlessly Clearing the Lot of Wild Growth
2. Misplacing of Buildings on the Lot
3. Failure to Protect Trees and Save Good Soil During the Building Operations
4. Too Much Haste in Planting
5. Careless Placing of Plants and Overcrowding

NOTHING is so costly as lack of forethought and even in the case of the smallest home on the littlest piece of ground it pays to consider the completed picture to-be before the first beginnings are attempted. Alteration is always wasteful and frequently impossible! A little coördinated thought in the first place will prevent costly and regrettable errors.

Curiously enough, just because the new home and plot of ground are small, there is often little or no consideration given to their possibilities and limitations whereas on the large estate the least detail is carefully weighed and balanced. The small lot will yield rich returns in added loveliness and charm if its relations to surroundings be carefully considered.

If you are planning to buy or to build a new home, first carefully and critically consider the homes of your neighbors. At once there will be revealed to you five commonplace blunders, which you may easily avoid.

Perhaps the best way to consider these really fundamental problems is in the order in which they present themselves to the home-maker. The first one comes with the clearing of the ground itself preparatory to building.

1. Destruction of Native Trees and Flowers

FAILURE to appreciate the value of native trees, shrubs, and flowers, which are found growing on many suburban lots is apt to be the first step that will tend to later disappointment. As soon as the land is purchased, most people start in by making a clean sweep of all underbrush, thereby losing a number of valuable and interesting plants. They refer to this operation as "getting rid of the weeds." Now the best definition of a weed is that it is a perfectly good plant in the wrong place. The new owner, however, does not usually take the time to find out whether these existing wild bushes are in the wrong place or the right place. Perhaps the underbrush, intelligently thinned, may serve as a picturesque boundary or as a frame for a flower

Mattie Edwards Hewitt, photo

WHO WOULD WANTONLY DESTROY?

All the artistry of man cannot achieve a better picture than the native woods (as with the Flowering Dogwood in this picture) often yield

garden. Individual specimens singled out may develop into excellent trees or shrubs.

Many plants found growing wild are considered some of our best landscape material, and are extensively cultivated and sold by nurseries. For example; the Flowering Dogwood, the Viburnums, Mountain-laurel, Witch-hazel, Sweet-pepperbush, Elderberry, Shadbush and many others.

A good day's work of clearing may remove what would cost considerable money to purchase and plant. Remember that wild growth is made up of the plants well suited to that particular soil and situation, and if you plant again in that spot you may not select things that find it so agreeable there. Thus the healthy native plants may be replaced by struggling and straggly looking foreign stock.

Take out only what is necessary for the building operations and decide what you are going to do with the grounds before destroying any more. Some very beautiful native trees are extremely difficult to transplant, even when small, and their existence on the lot is generally a great asset.

2. Placing the House and Garage

THE second opportunity for error is usually found in the location of the house and garage. This is a very important consideration because it will largely influence the future possibilities of the property. After the buildings are completed a decision made can seldom be changed.

The position of the house and garage will determine the location of driveway and turn court; the size, shape, and relation of garden features, lawn, and service area. The floor area in the house is carefully divided to conform to your needs and conserve space. The grounds about the house should receive the same consideration.

The advice of a landscape architect is at this time of more value than at any other period in the development of the place. He should collaborate with the architect so that the house may be placed, not only with regard to the exposure of the rooms, but also in relation to the best outlook, the possible garden site, and to allow for satisfactory laundry yard, road and garage location.

The builder of a suburban home, even if it is a very modest one, should not hesitate to get professional advice. Even one visit from a landscape architect, especially at the beginning, may be of great value, not only in showing the owner the way toward artistic development, but in preventing him from doing things which might later prove to be costly or irreparable mistakes.

3. Overlooking the Value of Top Soil

DURING the building operations the owner often fails to take proper care of existing trees, or to conserve the top soil. Much damage can be done to beautiful trees by neglecting to give them suitable protection from the workmen. The operations of the contractor extend far beyond the limits of the actual house, so it is generally well to take precautions covering the whole plot. The wheels of wagons are a serious menace, and many drivers will carelessly bark a valuable specimen. Young native trees and shrubs are often removed for temporary buildings, and clearings are made to dump materials without thought of possible damage. I have seen fires built by workmen against the trunk of a fine old tree, thus defacing it badly. The blaze from such fires often goes up into the lower branches and kill them. Ropes tied around trees to hold some piece of machinery in place, or to aid in hoisting materials, will do serious injury.

Excavated earth will frequently be filled around trees, If this be allowed to remain, and a well is not built to hold it away from the trunk, the tree will probably die. Pruning by workmen during their operations will often deform a well shaped specimen. Such mutilation can in most cases be either limited or dispensed with entirely without seriously inconveniencing the work. It is a good plan to incorporate in the building-contract clauses which will prevent the contractor from destroying or injuring existing trees or shrubs.

When preparing for planting about the foundations of a house I invariably find two very unfortunate conditions. First the soil is subsoil thrown out from the cellar excavation, and secondly, it has a very liberal quantity of bricks, stones, lumps of lime, tin cans, and other materials in which no self respecting plant would live. This condition means replacing with top soil, and unless it has been saved, it must be purchased. It is at this time that the owner realizes the value of "just earth." No doubt he had plenty where

S. H. Gottscho, photo

THE CHARM OF RESTRAINT

Thick planting is usually undesirable and expensive. Young forest trees do not fit under the window. A tree in the wrong place loses its value

his house now stands, but it is well buried under the subsoil removed from the cellar. In suburban districts it is well worth while to save in piles the top six to twelve inches of the existing soil if it be good.

4. Gardens Are Not Built in a Day

TOO much haste in planting is another common mistake. The danger here lies chiefly in the poor preparation of the soil. Many trees and shrubs will do well for a few years in unfavorable ground, but few will survive as good specimens. When the available plant food is used up you have ragged and usually unsightly plants. Time must be taken to put the soil in good condition. The incorporation of manure or other suitable fertilizer is essential unless the ground is rich. Poor drainage, as well as poor soil, makes it difficult for a plant, unless it happens to be one of those adapted to moist locations, so wet spots should generally be drained. Ground that has been newly filled in should be allowed to settle before planting it.

In the actual planting operations care should be taken to set the plants firmly, and to see that the earth is well packed around the roots, leaving no air holes. I think most people who plant for the first time fail to do this. Be sure to water newly planted stock thoroughly as soon as it has been put in. Do not neglect this important item. It is better to plant too high than too deep.

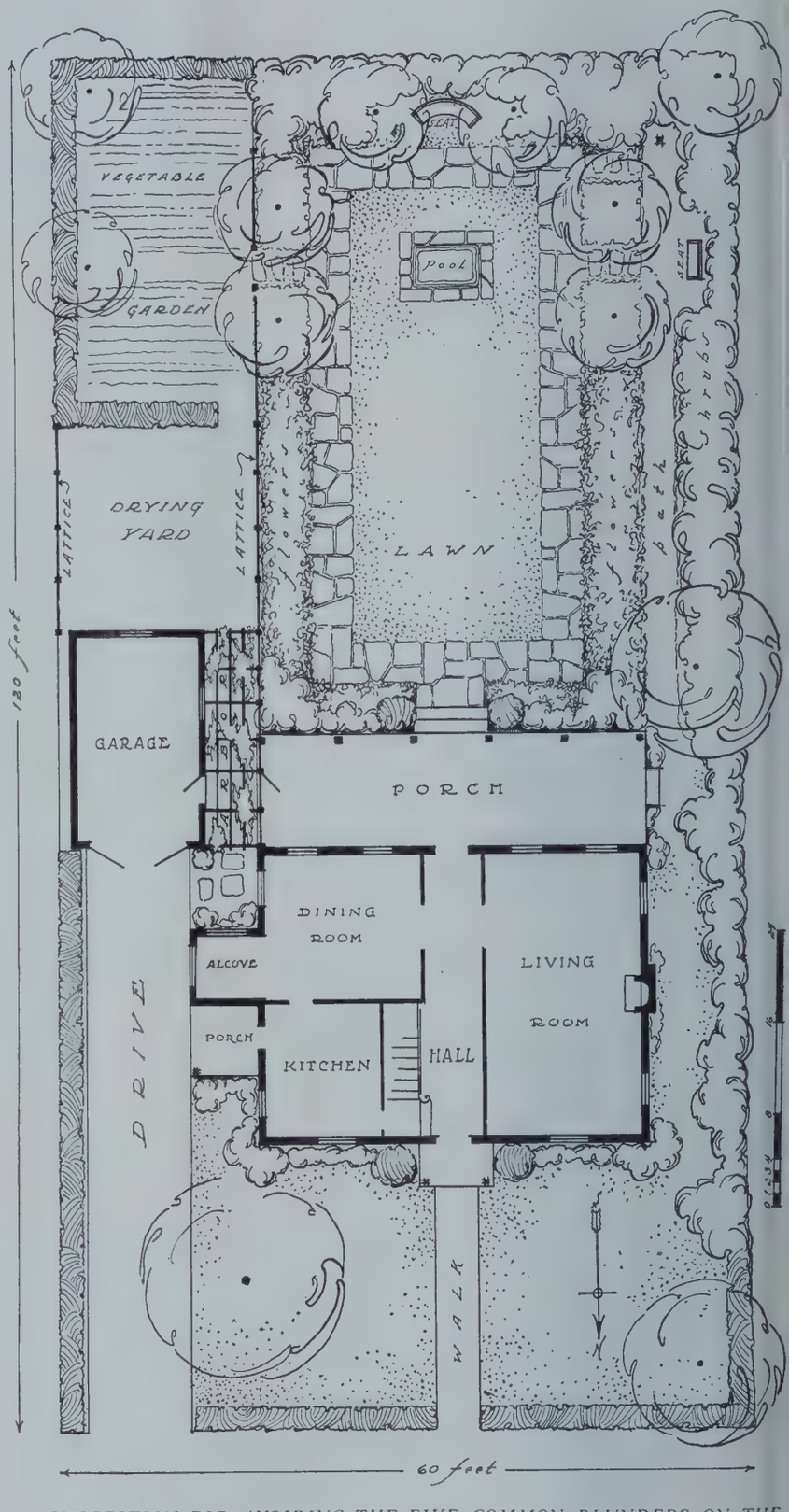
To make a permanent lawn, one which you will not feel like digging up in a few years, takes patience. The ground, if new fill, must settle first. Secure enough grade to prevent water standing in any spot. Seed should be sown only on top soil in which there has been incorporated plenty of fertilizer and lime, and only after the surface has been made very fine and smooth.

5. Failure to Allow for Growth

THE fifth mistake I have observed is the thoughtless placing of plants and over crowding. A tree which is planted in the wrong place will, for that reason, lose much of its value; in fact, later it may become absolutely objectionable, and its removal necessary. Lack of knowledge of the habit of a plant is often responsible for misplacing it. The cute little evergreen put under the window often is just a young forest tree, and it will grow up, gradually shutting out the light and cutting off the view outside.

People who would not consider buying another chair for a room that is now completely furnished, will come home joyfully with a tree or shrub without the slightest idea of where it can be put, or whether it be a suitable addition at all. But one healthy specimen is better than two struggling for the space.

For the average small home owner very thick planting is undesirable and expensive. I do not mean that all plants should be grown as specimens, in fact masses are usually preferable, but do not crowd the plants too much. There may seem to be a lot of space between them the first few years, but remember that under favorable conditions, most shrubs grow rapidly, and soon they will form a solid but graceful mass, each member being able t attain its characteristic manner of growt before reaching it's neighbour.



A SUGGESTION FOR AVOIDING THE FIVE COMMON BLUNDERS ON THE LITTLE HOME PLOT

The accompanying plan prepared by Prof. Loutrel W. Briggs is not offered as a "typical plan" but as a suggestion for showing the practical application of the principles laid down in the accompanying article. The garage is handy for the house and can be entered directly from the porch through the arbor. Space is not unnecessarily wasted in a needless driveway. The drying yard is screened from view yet is wide open on two sides, which is very essential as a drying yard should have abundance of air circulation. The central lawn area can be treated as a level or as a sunken garden. The shrubbery border on the west side may be adapted to any particular need, perhaps a rockery, or collection of particularly fancied plants. The plot marked for vegetables can be used in a variety of other ways. The house is designed to give enjoyment of the garden and thorough privacy. The service quarters are grouped together for practical convenience and not for conventional effect

RUGS THAT MAKE A RESTFUL ROOM

AMY RICHARDS COLTON

Decorator

Photographs for this and the previous article on rugs (December, 1924) by courtesy of Metropolitan Museum of Art, and by F. N. Demarest and Mattie Edwards Hewitt

II—The Discriminating Use of Rugs in the Home of To-day

Editor's Note:—In this article Mrs. Colton discusses the problem of present day rug furnishings. In the December issue (pages 253-256) she considered the beginnings of rug making, the oriental significance of the rug in the earliest days, and the part it played in the life of the people.

IN MORE unconscious times, when only the few ever traveled, carpets, like everything else, were made of the materials at hand, and the colors and designs were according to the local traditions. These facts gave a harmony and homogeneity to the floor coverings which our restless and eclectic age lacks. If we would curb our propensity for variety and novelty and in carpeting our floors consider instead the effect of the whole and the most suitable and attractive patterns, colors, and textures for the particular climate and style of architecture we are providing floor coverings for, the success of the whole furnishing would be immensely increased.

The use of rugs is older than recorded history. Around his homemade rug, woven by hand on a primitive loom, the wandering nomad as well as the more civilized Oriental planned his home; and among semi-civilized people on faraway Pacific islands, cocoa and rush mats were skillfully plaited as floor coverings for the huts of native chiefs.

Oriental rugs and cocoa mattings of our own time are the lineal descendants of these earlier weavings and plaitings. With the wealth of good examples in the past to draw from, there seems every reason why our own floors should be suitably and interestingly carpeted. If, in the manner of the Oriental, we would consider our carpets as the true foundations of whatever room or series of rooms we are furnishing, the common eyesore of a carpet too light, too dark, or inappropriately designed and colored, would cease to be such a common occurrence.

Where Spanish furnishings are introduced the gay colored rugs of the Navajo Indians may be used most harmoniously

A Japanese early 19th century raw silk rug

In cases where rugs or carpets are already owned, and for sentiment or economy must be retained, the problem remains the same; to build up the scheme of furnishing from the floor coverings. As a general rule these should be darker in value than the furniture covering, curtains, and walls; in fact darker than anything except the floor itself, for this gives a sense of foundation and firmness to the scheme of the room. To this rule there may be exceptions, as in the case of Aubusson carpets which are unusually light in value; but even so the floors underneath are much darker, and the colorings of the periods when Aubusson weavings were most in vogue were in a fairly light key.

It is surprising how a more or less commonplace patterned rug, or a plain one of an unattractive color, may be improved by adapting the color scheme of a room to such a rug. When a rug is too atrocious to have any possibility of redemption by this method, the dye pot can be resorted to, and an unruly pattern or color combination subdued into acceptable tones.

OF RECENT years there has been such a strong reaction from the use of patterned rugs in favor of plain, seamless carpets that many of our schemes of decoration have forfeited much of the richness and enduring charm which the fine old patterned rugs contributed to a room. One of the reasons for this reaction was the flooding of the rug market with garish Oriental rugs of doubtful origin, dyed with cheap chemical dyes—woven by hand it is true—but with all the individuality and fine traditions lacking, because of being woven too fast for a greedy Western market. Besides the poor patterns, poor dyeing and hasty weaving, many of the rugs were "treated" by acids to subdue the violent colors, thereby injuring the fabric, and even

While the Mohammedan religion forbids the reproduction of any human or animal forms in any way, nevertheless in Persia there is greater latitude in this matter and many of their rugs vividly portray hunting scenes such as shown in this Central Persian rug of the 16th century

an artificial gloss was added as a final touch to a spurious article.

When the department stores developed huge oriental rug departments and advertised sales, in which the general public was urged to purchase real Bokharas, Daghistans, etc. for $99.50, the discriminating public began to fight shy of Oriental rugs, excepting artists and collectors, who knew fine Oriental rugs from false, and still realized their permanent charm, in spite of the reaction against them.

The average buyer, of refined but easily diverted taste, began to get rid of the once cherished Oriental rugs and substituted the seamless Chenilles and Axminsters, while the less refined and more simple-minded public continued to purchase the modern travesties of Oriental rugs of the department stores and fake dealers for the advertised prices.

Fortunately the orgy of plain carpets seems to be waning, and with the greater tendency to furnish houses with individuality and some knowledge of the rules of architecture and decoration, the patterned rug is coming into its own again. Plain carpets will, however, always have their indispensable place: wherever figured chintzes are used on the furniture in bedrooms, and as all-over floor covering for a poor floor, on which a few choice Oriental rugs can be placed to give character and accent.

FOR nearly all living rooms, no other rugs are as generally satisfying as the Oriental ones from Asia Minor, Caucasia, Persia, and India. Chinese rugs, though also Oriental, and very beautiful, are so pronounced in color and design that their use is more limited, and they can only be successfully used where the scheme of the room is in perfect accord with them.

The wisest way to choose Oriental rugs from a decorative standpoint is to decide what general colors and patterns are preferred and then slowly to collect a group of rugs which are in harmony with each other, and which in size accommodate themselves to each other and to the room they are to be placed in. If an Oriental rug large enough to cover an entire floor is insisted on, it should be remembered that no antique rug can be found of this size. They were only used in palaces and are rare and fabulously valuable. One or two of the reliable rug houses, however, have reproduced large Persian or Indian rugs in very agreeable color schemes, and though they are frankly modern, the patterns are authentic and very early. One of these rugs gives a harmony and richness to a room which a plain carpet entirely lacks.

The present interest in Spanish forms of decoration and the frequent sales of Spanish works of art have made more people aware

Showing the beauty that may be produced where only geometrical figures are used, this Kazak rug lends itself to almost any style of furnishing

In this drawing room done in the manner of Louis XVI, the Persian rug in a semi-floral design blends with the brocaded upholstery of the furniture

of the beautiful Alpujarra rugs of the 17th Century, with their loop weave and their quaint, angular patterns in strongly contrasted colors in which highly conventional animal forms predominate. These rugs are dignified and beautiful enough to adorn the most formal room where Spanish furnishing prevails. In simple houses where a Spanish feeling is also desired the later peasant rugs of loop weave with very strong colors and geometric patterns can be used with enduring satisfaction.

In planning Spanish-American interiors there is no reason why fine old Navajo rugs, mellowed by time, should not be used. Originally, these so-called rugs were woven by the Indians for blankets, but they are quite heavy enough for light rugs and are now used almost entirely for this purpose.

An Aubusson rug of the French Empire with tapestry weave

A beautiful example of a 16th century Spanish rug in bird and floral pattern

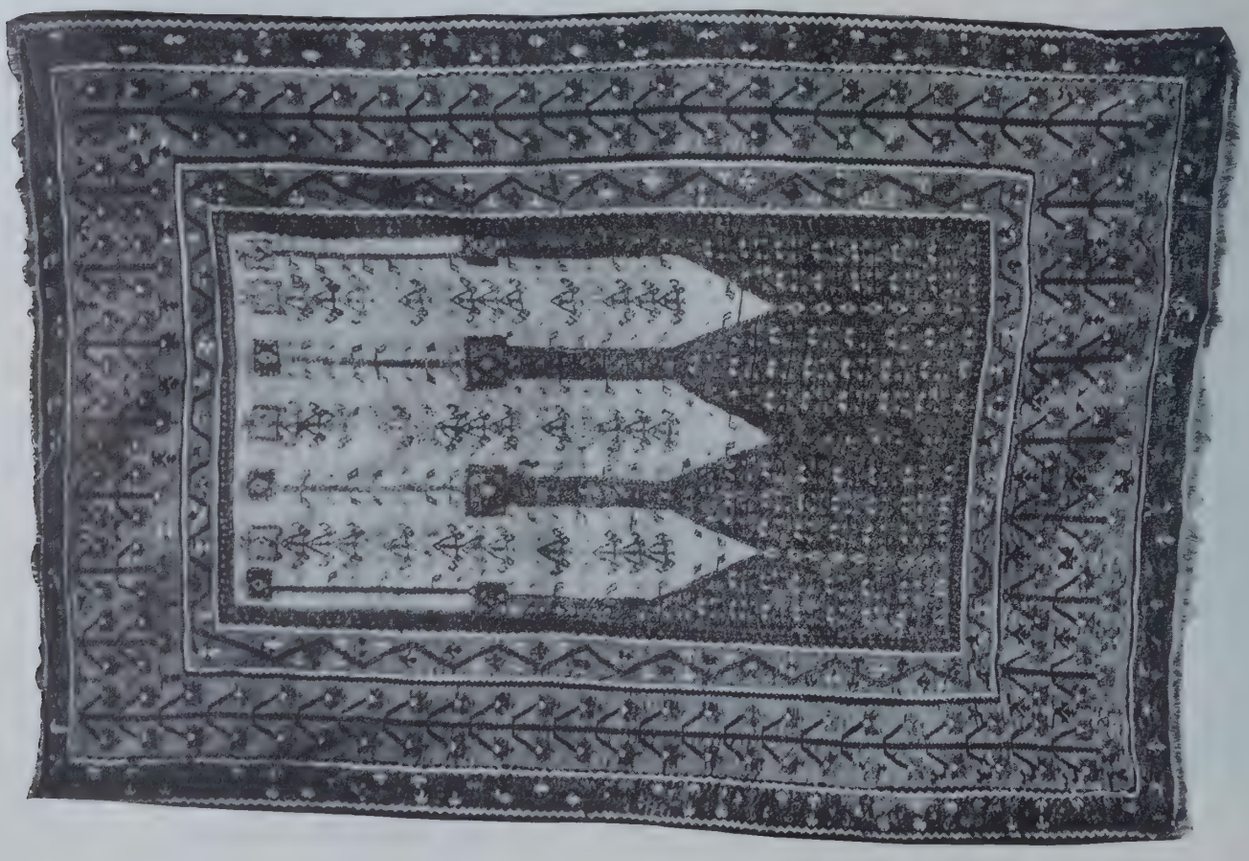
TO ALL lovers of early American interiors with an English flavor, the hook, rag, and braided rugs of our provincial ancestors are too well known to describe. They fit interestingly and appropriately into simple country houses, where the furnishings are in the English tradition and before 1850.

For seaside houses or those in the South, many of the rush rugs and cocoa mattings suggest a freshness, cleanliness, and coolness that no wool floor covering can compete with. Many of them are woven in interesting patterns, with plenty of color introduced, so that they are substitutes in a decorative way for the various patterned wool rugs.

In formal 18th Century rooms, antique or modern Aubusson carpets—with their smooth tapestry weave and classic or romantic designs—are a delightful foundation for the graceful and often ornate furniture of those periods. Many of them were designed by the greatest artists of their times and bear evidence to it.

In all this maze of floor covering the main thing is to keep one's balance, and to choose thoughtfully those that will best contribute a permanently satisfactory foundation for the furnishing of the rooms in which one is to live. In choosing, one must consider the colors, patterns, textures and materials in relation to the style of the house and the climate it is built in. The result should be a sense of harmony and peace that no other single item of furnishing is so capable of giving.

In richest colors the antique hook rugs of Colonial days lend gaiety and charm to rooms done in the early American manner



In the weaving of such rugs as this the artisan painted an individual picture developing it as he threaded the gay wools in and out on his antique loom. No two were alike and each motif has a distinct meaning especially in the prayer rugs which were carried by their owners on their travels. This is a beautiful example of an 18th century rug from Asia Minor with the smooth Kilim weave

MY TOPSY GARDEN

It is no Small Job to Turn $25 and a Small Plot of Ground Into a Lovely Garden with Bird Bath, Rose Arbor, Waterlily Pool and Color Scheme. But it can be Done.

ELLEN JEFFREY

The Veriest Amateur may Discover a New Trick or Two to Aid Him in Winning the Garden Game, for it *is* a Game and the Very Best of All Outdoor Sports.

In its second year "a tip from another Rose" brought this profusion of pink bloom almost covering the rustic arbor

AS TO a plan for a garden, I feel that each gardener should make his own. There are too many gardens looking just alike—each with its formal plantings, its birdbath, seat, sundial, pool, and hedges. A garden plan should grow to fit its particular plot of ground. If my little flower-garden has any special claim to beauty it is because it is original and unlike any other. My $25 Topsy-garden has given pleasure beyond the telling—and not to me and mine alone. And therein lies its greatest beauty.

It is called Topsy, for up to this year it "just growed" in the most casual sort of way. Then, realizing that it had "growed up" into something very lovely, I made a definite plan for it. I wanted a perennial garden that I could add to year by year—a sort of floral "add-a-pearl-necklace."

It began—this garden of mine—six years ago when we moved into a new home and some friends gave me some Iris, two small Peony roots, one little Dorothy Perkins Rose and two Rugosa Roses scarcely six inches high.

The new home was just a little house entirely surrounded by bare ground, dotted with piles of sand from the cellar excavation. I planted a packet of pink Hollyhock seed along the south side of the house and one each of Columbine and Sweet-William in the hot, bare garden-spot where I scarcely dared to hope they would grow.

WITH fruit trees, berries, grapes and strawberries to plant, a vegetable garden and lawn to make, the poor flower garden had to limp along as best it could, with annuals hastily planted each year to furnish the flowers I loved so well.

This last spring, when for the first time I really studied my garden, I found that the years had been piling up treasures for me. The Iris had grown from a few plants into more than enough to edge both sides of the garden path for 12 feet and to encircle a Waterlily pool. The two little Peonies had become stately, large clumps bearing royal blooms of deepest pink. I had "tipped" the original Roses and now had eight sturdy bushes to transplant.

In these six years, the lovely flower premiums given with THE GARDEN MAGAZINE, had furnished me with 20 choice spring bulbs, 75 Gladiolus, Dahlias, and a thrifty plant of Rosa Hugonis. My Hollyhocks had grown into a compact wall that must be divided. The soil in the garden had been built up year by year—a compost heap and stable manure for the vegetable garden chiefly (which is another story) and a single load each year, making the once sandy spot rich and loamy.

I HAD a good beginning for my garden and the next thing to do, as it was January, was to make a plan. As we round the bend of winter and face another new year, one turns with longing to thoughts of spring and flowers and gardens. My garden must have a path with an arbor at its entrance and a birdbath in its center, perennial borders, a Waterlily pool and grape arbor. The Hollyhocks were to be broken up and planted across the lower edge of the garden as a back wall to the garden-picture. Blue perennial Larkspur was to be planted in front of the Hollyhocks to make my blue and pink garden complete.

The actual space occupied by flower beds is small, but the way in which we have "landscaped" it makes it seem on a large scale.

We laid it out like a large "E" with an "O" for its center instead of the customary short bar. The main upright of the "E" is the garden path, the "O" is a rock garden with a birdbath in the center. The wide

curve along the vegetable garden is the bulb and Peony border, while the Rose arbor spans the beginning of the wide path.

This garden is at the south side of the house where we can look into it from our dining room windows. In the rear of the house is a large grape arbor with the Waterlily pool at the end—a most delightful spot as the shadows lengthen and the Iris bend down to touch the pink and white Waterlilies. Any one can have Waterlilies, they are as easily grown as Hollyhocks.

THE cost of my garden has been unbelievably low—$25 would more than cover everything ever bought for it (the manure that was bought, went to the vegetable garden) or would have cost had I purchased the original Iris, Peonies, Roses and Dahlias. None of the plants were specialties—they were just simple, inexpensive flowers such as any one can secure or grow from seed. And it has not been difficult to care for them. Gladiolus need only such cultivation as was given the Carrots while the Roses were sprayed with bordeaux. I have been told to use sulphur and many other such things, but it has not been necessary. The illustration shows that the Roses were all that could be desired.

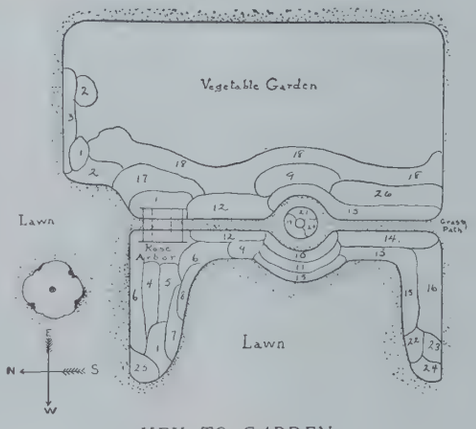
My Dahlias, which had so abundantly multiplied through the years, were given the simplest care, my only concern being to keep them well watered and to hoe them and the whole garden frequently. That was all. I may some day have "blacks" on my Delphiniums—I haven't as yet, perhaps because a little lime was occasionally worked into the soil. I was warned not to plant Dahlias until the end of May, else they would surely rot. I planted some in mid-April and thereafter it rained steadily for several days and not one rotted! Lime was hoed in around the Bearded Iris when they finished blooming. This (June) is the best time of all—so say most authorities—to divide and move them, but I have also shifted them all over my garden in either spring or fall.

Had I purchased the Roses, Iris and Peonies their cost would have been—$6.50; other shrubs, Waterlilies, English Ivy and annuals etc., $7.35; Lilies for next year, $3.50; Concrete, $5.00. Total $22.35.

I have had a succession of pink and blue and white beauty all summer long. My perennial Phlox and Delphiniums would not flower this year, so I planted the annual varieties for the desired color and the flowers for cutting. In fact, I shall always plant a few annuals—quick-growing bits of color. The garden was planted in "clumps" to give bright patches of color and even the Ragged-sailors stood up manfully when massed as they were. This mass planting is most effective and I think that I have never seen a lovelier garden picture than the large patch of deep blue Cornflowers against the pink Roses of the arbor. Only one of the Roses reached the top this year to hang there heavy with pink balls. But next year, the small bushes grown this year from tips will have reached the top and I know that the arbor will be a "lovesome spot" of pink.

It is such an easy matter to layer or tip roses and a fascinating bit of work as well. All that I do is to bend down a long spray, cover its center with a mound of good loam, press the earth down firmly and keep it well watered. This spray is not cut from the parent bush until spring planting-time. By that time, it will have started good, strong roots and shoots and the new plant may be cut in safety. This does away with danger of freezing in the winter, as both the main bush and the new plant are covered with leaves and straw.

Surrounded by a white carpet of Candytuft the birdbath proved a most attractive spot to many hundreds of the garden's feathered friends



KEY TO GARDEN

1	Roses	14	Gladiolus
2	Peonies	15	Larkspur
3	Bulb border	16	Hollyhocks
4	Lilies	17	Dahlias
5	Delphinium	18	Castor-beans
6	Pinks	19	Ageratum
7	Cornflowers	20	Candytuft
8	Pink Asters	21	Portulaca
9	Pink Zinnias	22	Weigela
10	Pink Phlox	23	Forsythia
11	Forget-me-not	24	Lilac
12	Iris	25	Snow-on-the-Mountain
13	Gypsophila	26	Cosmos

THE small rock garden is in the center of the path, which, at this point was widened into a circle 12 feet in diameter. The actual "rockery" was six feet wide, leaving a three foot grass path around it on all sides. A mound of earth 1½ feet high was made in the centre of this circle, the concrete birdbath—home-made—securely placed on top of this mound with English Ivy twining 'round it. The rock garden was planted freely with dwarf white Candytuft, Ageratum, and pink Portulaca. It has been a bed of snow all summer—the grey rocks "so old and wise" peeping out here and there.

Iris edges the path to the rock garden, from there the Gladiolus border it on one side, pink Four-o'clocks, Cosmos, and blue Larkspur on the other, with tall Castor-beans to make a bronze wall between the flowers and the vegetables. The Best Gardener loves his vegetable garden so well that it rivals in beauty the flowers on the other side of the walk.

The material for the rustic rose and grape arbors came from Sassafras saplings from the near-by woodlot. Were I to buy wood for such arbors, I should choose either cedar or chestnut as these hard woods last longer.

Making the birdbath and Waterlily pool was the most difficult work of all—the story of which may be told in detail another time.

Another year, my garden will have new bushes of Weigela, Forsythia, Bridal-wreath, and Syringa. These I have grown from clippings planted according to directions given in THE GARDEN MAGAZINE for last July. These were cut from woody stems that had attained their maximum growth for the season, the tips cut off until the slips were about 18 inches long. These were then planted in trenches of sandy soil. Kept wet and in the shade, they produced sturdy little plants. And I shall also have that most exquisite of garden pictures—a row of Delphiniums against a row of white Madonna Lilies with the pink Roses over the arbor at the end. These 12 bulbs cost me $3.50—my added pearl for next year's garden.

Possibilities Plans Persistence

J. C. CUNNINGHAM

Giving New Life to an Old House

The finishing touch of purpose and repose was given when the planting of vines, shrubbery and lawn began to lend their softening effect

THIS is the story of five acres of land on the edge of a mid-western town, of a small four-roomed cottage turned into a livable, satisfying home by the practical application of the three P's essential in home-making: Possibilities—Plans—Persistence. When the little home was turned over to its new owner he found that the four-roomed cottage could be united with the barn with most interesting results. He found also great Elm trees and Oaks only awaiting a careful hand to trim them, with one removed here and there to prevent overcrowding and to open up vistas of the sweeping country beyond.

Possibilities

But amid this wild growth birds sang in the trees and the little brook at the rear of the tract invited the children to wade; begging also for a rustic bridge to span its waters. The man and his wife agreed that the first P—Possibilities—was given them in fullest measure.

Plans

An architect was consulted and a very rough ground plan sketched and studied. Another was carefully worked out for the grounds so that each would be developed in relation to the other. These plans required many hours and days of careful consideration and readjustment.

When completed the plans called for moving the barn. This was done by turning it quarter way round, joining it to the right side of the cottage, its long roof line thus lending character and symmetry to the new house. A cap roof was added to the cottage itself to carry its roof to that of the barn. Four dormers were then set in to make the upstairs of both buildings into a unit.

Persistence

The approach to the house, its front lawn, and the planting were as carefully studied as the house itself. Fence posts gave way to shrubbery; the rutted, road-cut front yard to a grassy lawn, with spring-flowering bulbs

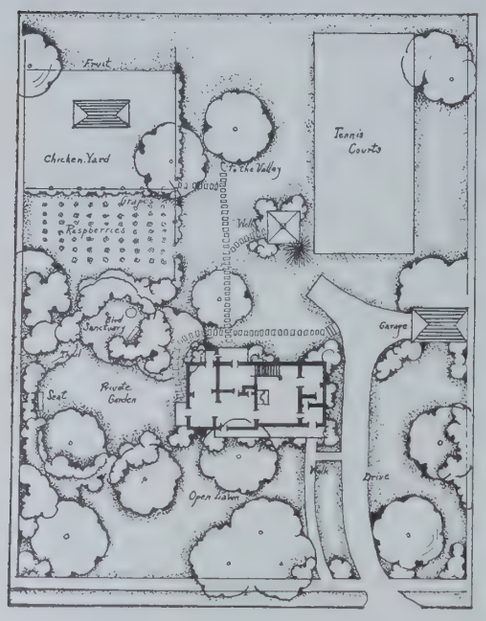
But the barn was moved up and turned quarter way round to give an interesting gable front as well as plenty of room

It took courage and perception to see the possibilities inherent in this small but well-built cottage, and new barn located on a five acre tract at the edge of a small town

and red Geraniums scattered among the shrubs to provide gay splotches of color.

That part of the grounds near the kitchen was designated as the service yard, and contains the poultry runs, berry patches, and the garden. It is screened from the remainder of the grounds with lattice work which in time will be covered with bearing Grape vines.

The third division of the grounds may, for lack of a better name, be called the play area. This portion includes the tennis court, sand pile, teeter, swings, and play house. In reality it extends back to the hill overlooking the brook and down to and including the stream itself.



The private portion of the grounds where "neither the man on the street nor the weeds in the garden" detract from an hour's relaxation

The fourth and last portion of the home grounds is known as the private area. It is screened from the street by a planting of shrubs and from the service area with vine-covered lattices. It is a welcome retreat with a bird bath and a small pool adding points of interest. Here neither the man on the street nor the weeds in the garden detract from an hour's relaxation.

This third P—Persistence—has been present all along and must extend through the years if the possibilities and plans are to be worked out to their happiest conclusions.

More Shrubs To Fit Southern Gardens

To the Editor of the Garden Magazine:

THE article about gardening in North Carolina, in the Southern (November) issue of the GARDEN MAGAZINE & HOME BUILDER which I enjoyed thoroughly, makes me want to talk a little bit myself.

Mr. Manning doesn't mention one shrub, which is to me the very choicest broad-leaved evergreen shrub for this climate that we have —with the possible exception of Abelia— and that is the Elaeagnus, sometimes called Japanese Oleaster. One of the common names for this shrub is Silver Thorn, because the bush is thorny and the under side of the leaf is silver. We have a native variety that is a very pretty shrub, but it is not evergreen like the Japanese one. Some one else recommended this shrub in the GARDEN MAGAZINE & HOME BUILDER a few months ago and I was glad to see its praises being sung. There is not as much of it growing in North Carolina as there should be, but that is simply because our people don't know about it and because most of the nurserymen don't know how well it does in this climate. I was talking with a representative of a Northern nursery some years ago about shrubs and I mentioned the Elaeagnus. He seemed very much surprised to learn that it holds its leaves in this climate. There is only one objection to it and that is that it grows so fast it keeps one very busy cutting off the long shoots. I usually trim mine twice a year. But that might also be considered a recommendation for most broad-leaved evergreens are slow growers.

Few people know too what a wonderful climate we have for growing things in North Carolina. For that reason I find gardening the most fascinating occupation in the world. Right here in Raleigh, where the East and the West meet—so far as the State (which stretches from the seashore to the mountains) is concerned; and the North and the South meet, so far as the whole country is concerned —we have a climate that will grow almost anything, not all of them to perfection, but one can always take a chance with a reasonable hope of success. Shrubs that thrive in the cold of the mountains, like Rhododendron and Kalmia, will grow side by side with Pittosporum and the Banana-shrub (Magnolia fuscata), Olea fragrans, and even the Japanese Loquat (Eriobotrya japonica), all of which most nurserymen will tell you are not hardy in this climate. But I have had all of them— so I know. Some of them may need a little petting, but I had a Japanese Loquat which grew to a height of twelve or fifteen feet and went through a severe winter when the thermometer dropped to eight degrees and stayed there for over twenty-four hours. That was an unusual spell of weather for us, as our winters are quite mild, though not like Florida, of course, but there is hardly a month in the year when we can't find some flower or shrub in bloom out of doors. One of our valuable shrubs is the winter Jasmine (Jasminum nudiflorum), which is often covered with its little yellow blooms for weeks during midwinter. Last year I think it bloomed from the middle of December until the first of March. Two or three times during that period the open flowers were killed by a freeze, but as soon as it turned warm again, fresh buds opened.

Another most valuable shrub that I seldom see spoken of or advertised by nurserymen is Meratia or Calycanthus praecox—Sweet-shrub I believe it is sometimes called. My great-grandmother always called it the "Siberian Shrub," because as it bloomed in midwinter, no matter how cold it was, she felt sure it must have come from the coldest climate in the world. I have seen it in full bloom when a cold spell would set in and a heavy sleet cover each little blossom with a coating of ice—but when the sun would shine again and the ice would melt, the blossoms would be just as fresh and just as fragrant as though it were midsummer.

I. B. BUSBEE, Raleigh, N. C.

LEOPARD'S-BANE FOR THE SPRING GARDEN

E. I. FARRINGTON

A Group of Yellow-flowered, Daisy-like Perennials That Are Good Enough to Be Popular

AMONG the few excellent garden subjects which have been neglected to a large extent in this country are the Doronicums. Few perennials make a finer show in early spring, and yet it is only an occasional catalogue which lists them at all. Even then it is seldom that more than one or two of the several excellent kinds are mentioned. As a matter of fact there is more or less confusion among the different kinds, and some of the names given in catalogues are misleading. The common name for the Doronicum is Leopard's-bane, and it blooms in April, May or June, according to the species and climatic conditions. The daisy-like flowers are orange or yellow and last a long time when cut. Indeed, the Doronicums are worth growing if only to provide flowers for house decoration early in the season.

Doronicum caucasicum is probably the best-known kind. It is yellow and grows about a foot and a half high. D. Clusi is another low-growing kind, but has larger flowers than caucasicum and blooms a trifle later. The flowers are golden yellow and very showy. This is a very excellent plant for both the border and the rockery, and ought to be better known.

A taller kind and one much grown in Europe is D. plantagineum. It often reaches the height of three feet or more and makes a strong, bushy growth. D. excelsum is really a variety of plantagineum, although often catalogued without the species name. It is also sometimes listed as Harpur Crew. The leaves are broad and spread out close to the ground. The stems are long, slender and crowned with flowers sometimes four inches across. Planted in masses it makes a most impressive showing in May or June. Perhaps it should be stated, though, that D. plantagineum and its variety are not quite so free with their flowers as the dwarfer kinds.

SOME catalogues use the term D. magnificum. Probably the plant referred to should properly be listed as D. plantagineum excelsum. Then there is D. cordifolium, an Alpine species which is a good plant but not often grown.

With the exception of the last named all of the Doronicums thrive in good garden loam. They are of extremely easy culture and will bloom freely even in partial shade, although they flourish in full sun, too. Moreover, they are not averse to a spot which is somewhat moist.

All the Leopard's-banes can be readily propagated by division, the work being done preferably immediately after the flowering season. If it is desired to make a bed quickly with only a small beginning, the plants may be cut up almost piecemeal without harm.

It would certainly seem as though this valuable perennial ought to be better known and more widely used. As a matter of fact, it suggests itself as an excellent plant for florists, for it responds readily to forcing, and the plants that have been potted up should sell well in early spring.

ALL LEOPARD'S-BANE IN OUR DEMONSTRATION GARDEN

Among the early summer blooms the tall growing Doronicum plantagineum excelsum always gives rise to questions from visitors to Garden City. The daisy-like flowers are clear bright yellow, three inches or more across

WORKABLE PLANS FOR THE NEW HOME'S LITTLE GARDEN

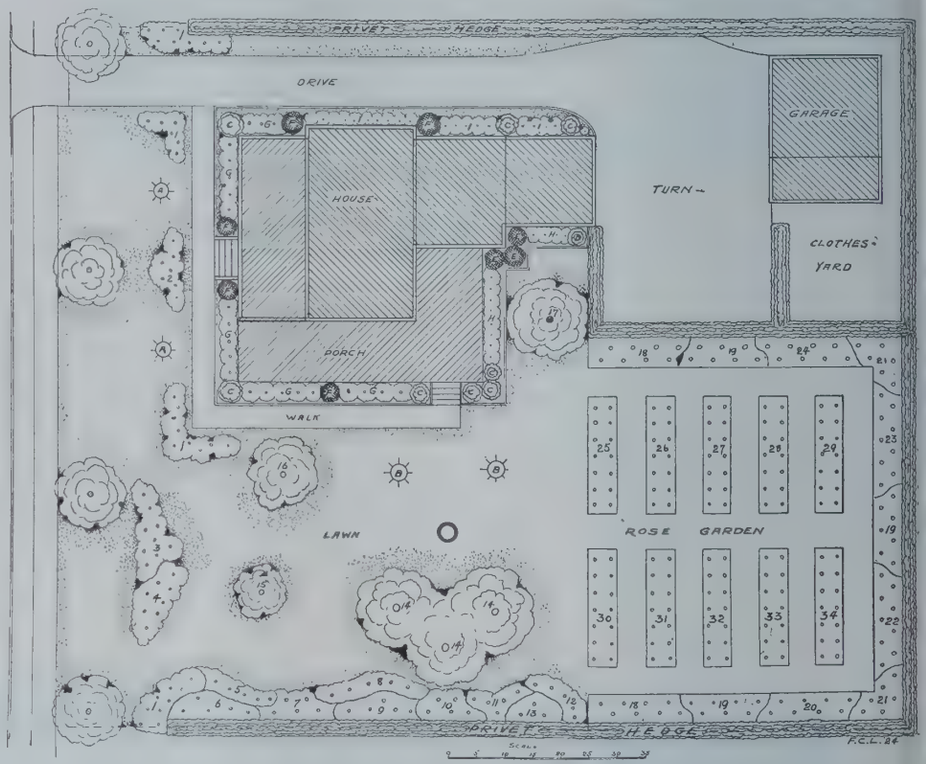
Prepared by FRED C. LIEBLE

EDITORIAL NOTE: *Each year many readers ask us to make simple individual plans for the little home garden. Earnestly as we desire to serve each of our readers, we have found it impossible to render that particular service. We have, however, taken three garden problems (which are fairly representative) and are presenting them in this number, not with the wish that they be copied in all their details but with the thought that the inquiring reader will find in them some part that he may adapt to his own plot. After all it is the working out the solution of one's own problem that is the spice of gardening.*

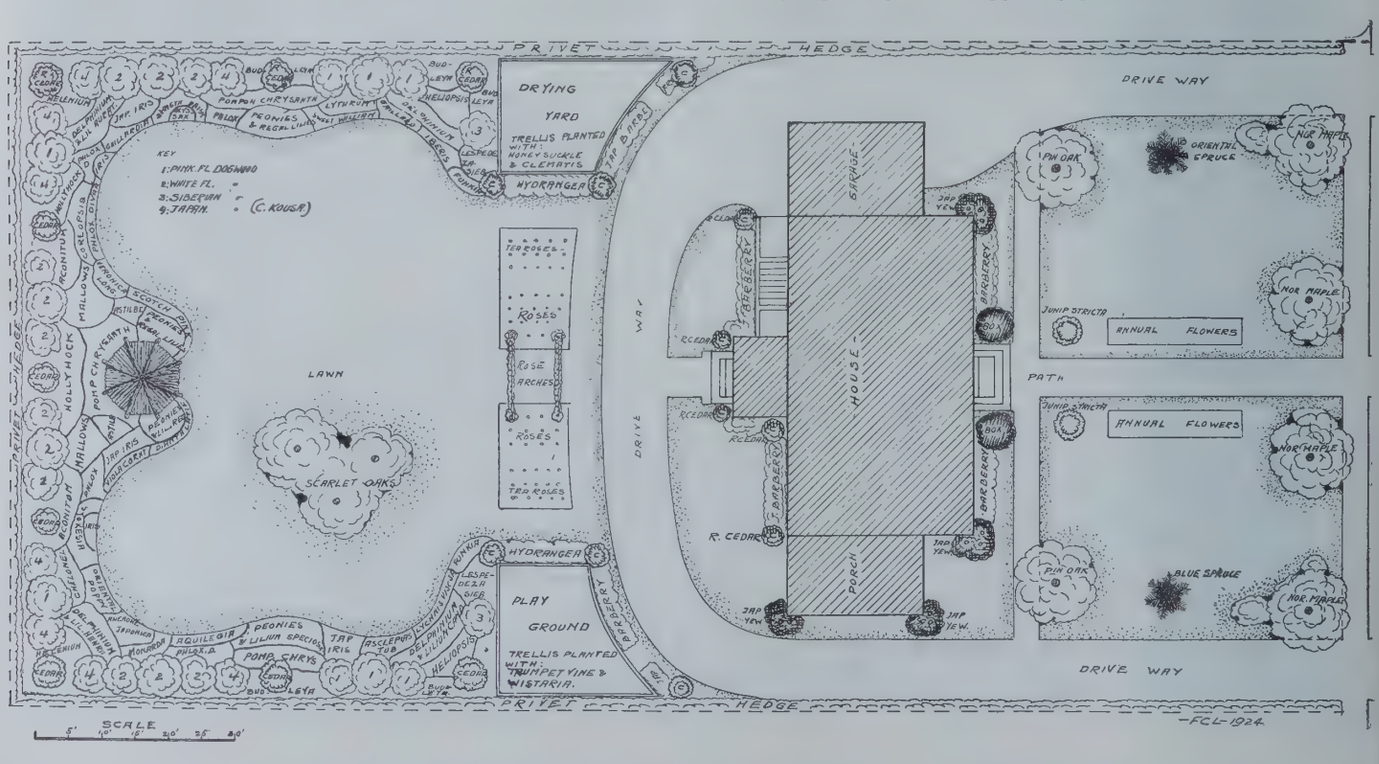
IN PLANNING the suburban home the completed picture should be borne in mind from the first. For not by houses alone are homes made to-day. A garden is an integral vital part of it and must be carefully planned to fit the house if the new home is to bring the greatest return in pleasure and beauty to its owner. The smaller the plot of ground the more is this necessary.

A little consideration of these plans will reveal how different simple features may be adapted to especial needs. Obviously no one plan can fit every garden. It would be most unfortunate if it did! Each garden should have its own character. The home owner who desires to make his home individual and distribute his garden spaces to the best possible advantage will find here a lot of suggestions.

Particular attention is given to the placing of the garage and other service necessities of the home and yet these are not allowed to obtrude into the garden picture. Each of these plans shows a different type of garden and these varied units may be combined to fit individual needs. The plans are so carefully developed that portions of them may be lifted out or the diagram used with different



PLAN A.—*Where Roses are the feature with a few popular favorites and flowering shrubs to lend diversity*
(See planting detail on opposite page)



PLAN B.—*A more balanced treatment where the collector can have ample scope. The large open lawn is completely framed by a flower border with a few striking shrubs. The service spaces are completely screened*
(Full planting detail shown on plan)

plantings. In plan C, for instance, the lawn may be used as a vegetable garden with the border as a frame. In these plans there is no thought of producing elaborate landscaping effects. Rather do they point the way to a first solution of the average garden problem of the new home permitting further development later. The important thing that they show is the need of starting with an appreciation of the relative value of the two parts of the home.

The planting schedules are merely suggested—they show no rare and costly varieties but instead, the simple garden favorites that may be procured from any nurseryman. In selecting from these lists or substituting preferred kinds or varieties the gardener can indulge his own taste and preference—another way of making his garden individual and unlike any other.

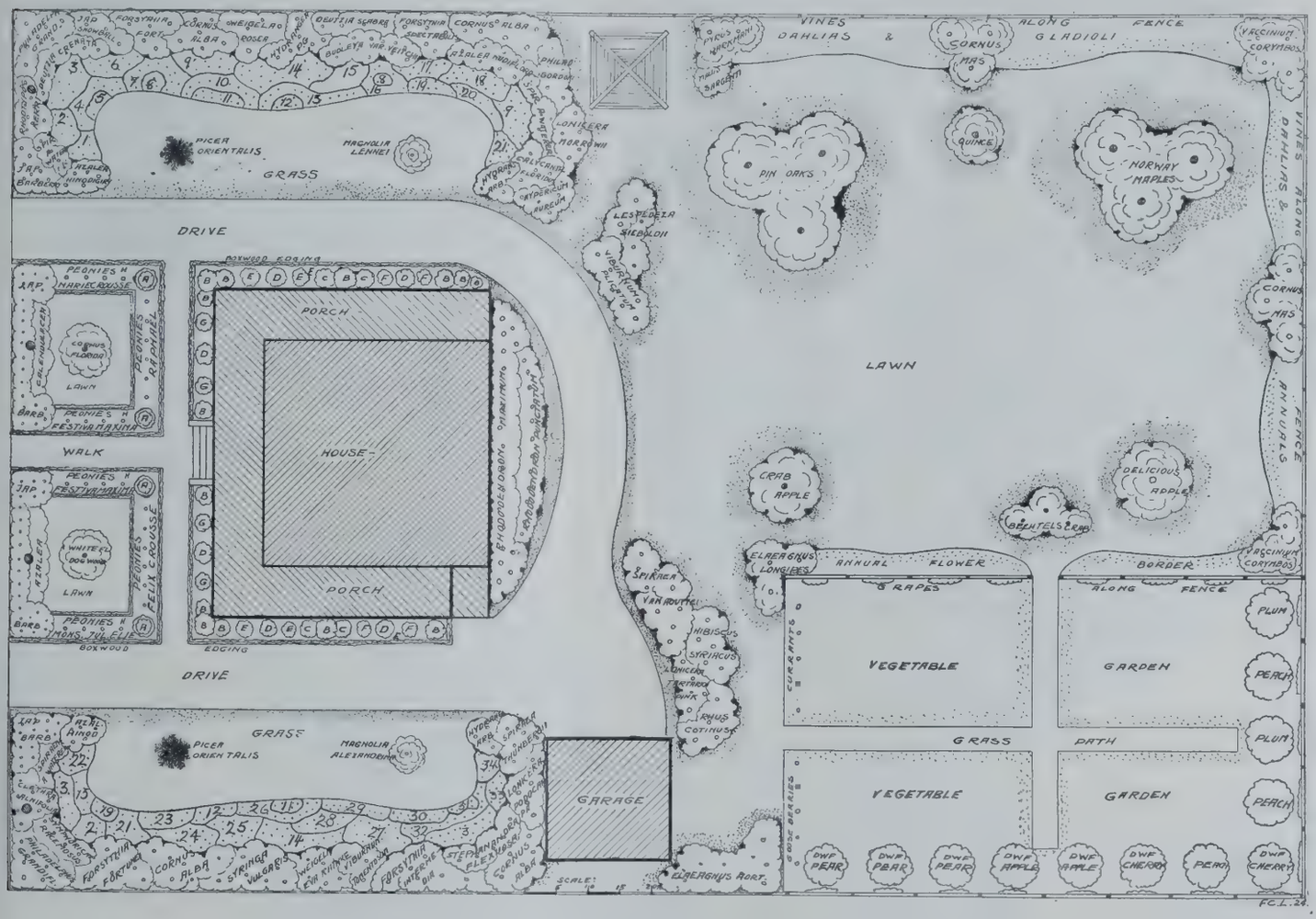
WHAT TO PLANT IN THE HARDY FLOWER BORDER (PLAN C)

1 Phlox Miss Lingard
2 Digitalis purpurea gloxiniaeflora
3 Delphinium belladonna
4 Gaillardia aristata
5 Iris Blue Jay
6 Aster White Queen
7 Hemerocallis flavescens
8 Papaver orientale
9 Helenium autumnale
10 Pyrethrum roseum
11 Iris Mrs. Darwin (White)
12 Iris Gracchus (Yellow)
13 Dianthus barbatus
14 Delphinium hybrids
15 Pompon Chrysanthemum
16 Shasta Daisy
17 Chelone Lyoni
18 Aconitum Fisheri
19 Iris Black Knight
20 Dianthus plumarius
21 Lupinus polyphyllus
22 Aquilegia vulgaris
23 Asclepias tuberosa
24 Campanula pyramidalis
25 Pompon Chrysanthemum Normandie
26 Dianthus latifolius atrococcineus
27 Campanula persicifolia alba
28 Astilbe japonica rubens
29 Alyssum saxatile
30 Phlox Hermine
31 Iris Navajo
32 Pompon Chrysanthemum Harvest Moon
33 Lythrum roseum
34 Anemone Japonica alba

EVERGREENS ABOUT THE HOUSE

A Boxwood (Dome Shape)
B Taxus cuspidata (dwarf)
C Juniperus japonica
D Pieris japonica
E Crataegus Lalandi
F Pieris floribunda
G Pachysandra (Ground cover)
H Vinca minor (Ground cover)

Plant Lilies between Peonies in front of house and among Delphinium in Herbaceous borders; plant clumps of Narcissus and Darwin Tulips in the fall for spring bloom; also distribute a dozen or so Amaryllis Halli, three in a clump, in the hardy border.



PLAN C—*Naturalistic planting of shrubbery and herbaceous perennials—providing amply for the household flower needs, with fruits and vegetables for the more practical phases of home-keeping*

PLANTING SUGGESTIONS FOR PLAN A

EVERGREEN MATERIAL

A Retinispora pisifera
B Thuya Standishi
C Retinispora pisifera squarrosa
D Juniperus virginiana
E Juniperus communis Douglasi
F Taxus cuspidata
G Azalea hinodigiri
H Berberis Thunbergi
I Andromeda Catesbaei

SHRUBS AND TREES

1 Berberis Thunbergi
2 Callicarpa purpurea
3 Symphoricarpos racemosus
4 Symphoricarpos vulgaris
5 Spiraea Anthony Waterer
6 Forsythia Fortune
7 Cornus alba
8 Hydrangea paniculata grandiflora
9 Syringa vulgaris
10 Lonicera podocarpa Macki
11 Stephanandra flexuosa
12 Hydrangea arborea
13 Tamarix africana
14 Quercus palustris
15 Magnolia conspicua
16 Betula alba pendula
17 Acer platanoides

ROSES

18 Los Angeles (Pink)
19 Frau Karl Druschki (White)
20 Sunburst (Yellow)
21 Gruss an Teplitz (Red)
22 Radiance (Pink)
23 Ophelia (Pink)
24 Duchess of Wellington (Yellow)
25 Mrs. Calvin Coolidge (Yellow)
26 General McArthur (Red)
27 Jonkheer J. L. Mock (Yellow)
28 Lady Hillingdon (Yellow)
29 White Killarney (White)
30 Souv. de Claudius Pernet (Yellow)
31 Red Radiance (Red)
32 Columbia (Pink)
33 Mrs. Aaron Ward (Yellow)
34 Kaiserin Augusta Victoria (White)

THE ENDURING SUITABILITY OF THE COLONIAL

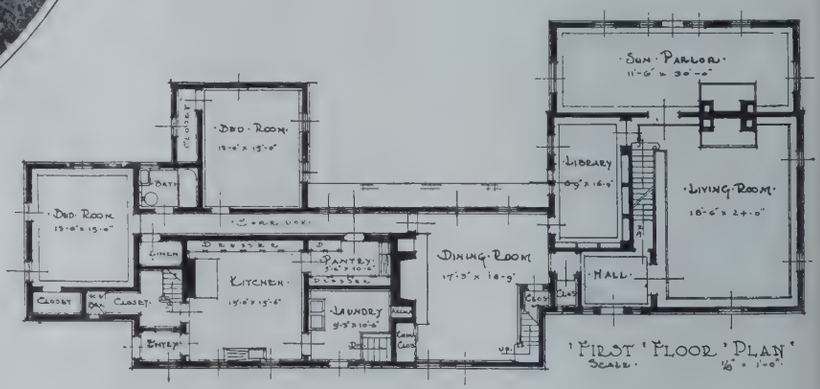
Home of Mr. C. B . Burrowes, at Roslyn, Long Island

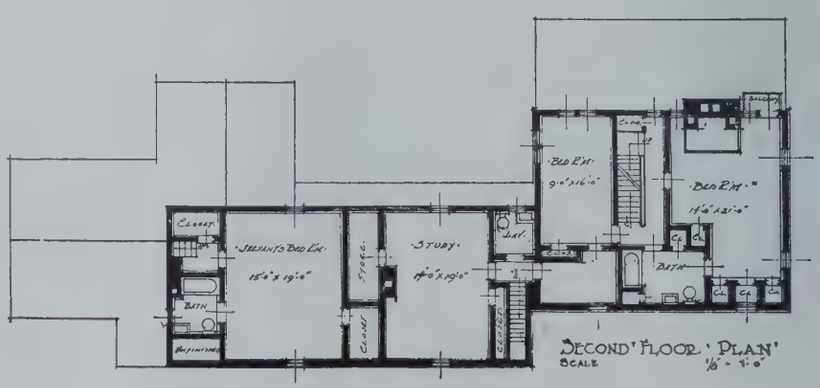
AYMAR EMBURY, II, Architect

Photographs by Wurts Brothers

FOR so long we have been accustomed to look with reverential eyes upon all the arts if the Old World, to believe that "made in England," "made in France," "made in Germany" is of itself a stamp of superiority that it comes as a bit of a shock—albeit a pleasant one—to learn that, in architecture, America has to-day outstripped the continent. In a critical survey of current country home design Mr. Russell Whitehead states (*The Architectural Record* for November, 1924) that "if we have not succeeded in proportion to our opportunities, we have at least designed and built a multitude of small and unpretentious houses which far surpass the average of modern work outside this country." Heartening news indeed!

And, curiously enough, of the various elements which have contributed to the creation of a distinct national style none seems more persistent or more suited to present-day landscape and living in many localities than the Colonial which sits as comfortably on the wind-swept spaces of Long Island (the accompanying pictures bear witness to this) as within the shelter of inland Illinois (see pages 304—305). Their very simplicity lends them dignity and such an air of inhabitableness that they continue permanently welcome as abodes of men who care for refinement and appreciate continuity. Their esthetic appeal is delightfully described by Mr. Lewis Mumford in his recently published "Sticks and Stones"—a book, by the way, which no lover of houses can afford to miss—"the whiteness of our Colonial architecture is an essential characteristic; it dazzled Dickens on his first visit to America, and made him think that all the houses had been built only yesterday. The esthetic reason for delighting in these white Colonial farmhouses is simple: white and white alone reflects the surrounding lights; white and white alone gives a pure blue or lavender shadow against the sunlight. At dawn, a white house is pale pink and turquoise; at high noon it is clear yellow and lavender-blue; in a ripe sunset it is orange and purple; in short, except on a gray day it is anything but white. These old white houses, if they seem a little sudden and sharp in the landscape, are at least part of the sky; one finds them stretched on a slight rise above the highroad like a seagull with poised wings, or a cloud above the treetops."





A MODERN HOME THAT WEARS AN AIR OF HISTORY

Even the laymen recognizes at once that this type of architecture is distinctly American and there is a refreshing straightforwardness about Colonial design that seems to embody that very spirit of our countryside. Home of Mr. C. B. Burrowes, at Roslyn, L. I.

ANOTHER VIEW OF THE BURROWES HOMESTEAD

Fortunate in its setting of Elms and Apple trees this dwelling needs only a mellowing margin of greenery along its base to bind it more completely to the land on which it so comfortably rests

THE MAGIC OF A YEAR FROM SEED

1922-1923

M. K. F.

Not a Sparsely Planned Garden Looking Two or Three Years Ahead but a Rich Riot of Color in One Year With Every Bit of Brown Mother Earth Covered Up by a Profusion of Bloom

HARD? Not at all. It's the simplest, easiest thing in the world, to have a full garden of flowers in the current year provided you go at your task with love and enthusiasm and a conviction that the work entailed will prove a great joy and constant satisfaction.

It is assumed that this article is to be read, and perhaps the work emulated, by women (and mere men too) who wish to toil in the garden themselves and who will realize that it is not necessary to employ a staff of men to carry out this plan.

The best time to begin gardening is in dead winter, when the snow lies white upon the ground and you sit before a cheery open fire with the new crop of flower catalogues at hand. As you open these harbingers of spring, hope thrills in the human breast—everything seems possible to believe and you see with your mind's eye all the "giganticums" and "grandifloras" blooming and flourishing in your garden-to-be, with a luxuriance far surpassing the illustrations in the catalogue, and that's "going some." Then is the time to transmute thought into action.

With enthusiasm burning at fever heat and with that touching confidence that betrays the true gardener, that *this* year you're going to have a better garden than ever before, take your pen in hand and write out your seed order for the coming spring. Don't wait till March, when the seedsmen will be working over-time to fill other people's orders. Do it now and you won't be disappointed by being too late to get something you had particularly set your heart on. And, besides (though this may seem childish to people as yet unaffected with the benign virus of gardening), after your seed order reaches you, while winter drags on with leaden feet and spring seems unaccountably delayed, it's great fun to take out your precious packets of seed and read out their lovely high-sounding Latin names and sort them according to color or type and dream and dream of happy days to come.

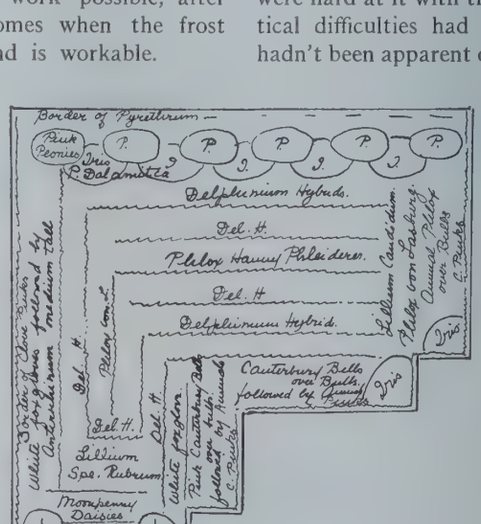
Well, that's the beginning of any garden; and the first practical work possible, after your plan is made, comes when the frost is gone and the ground is workable.

A Late Start Is Made

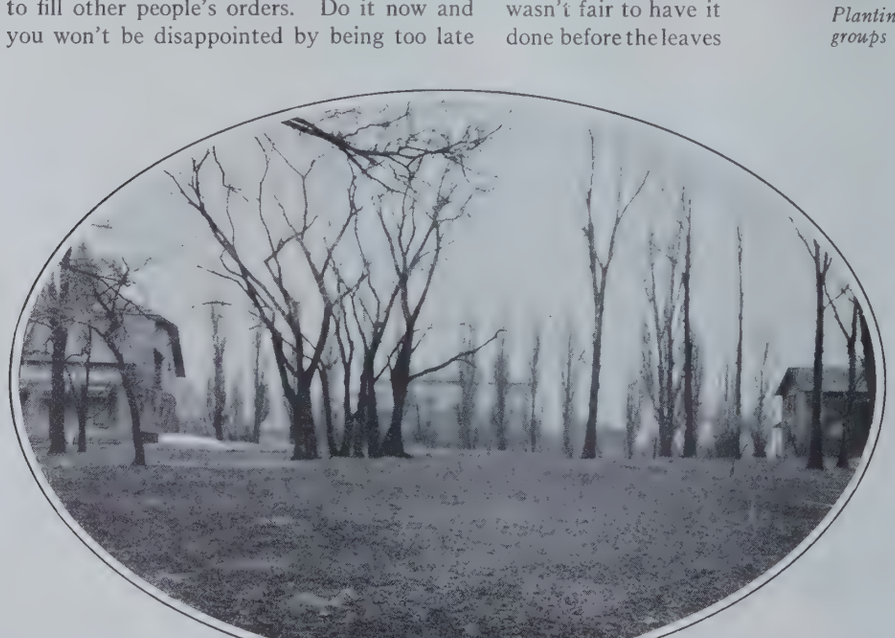
IN THIS particular garden of mine, work started late because spring is especially capricious in central New York and the seeds weren't planted in flats till the middle of May. In the meantime, however, the services of a photographer were requisitioned to take a "before" picture. Perhaps it wasn't fair to have it done before the leaves were on the trees, but all the grading and dry wall had to be started before we could make an early seeding of grass for the new lawn.

No picture could possibly do justice to the lack of charm which characterized this piece of ground—the lumps and hollows and whalebacks, the horrid, spotty shrubbery planting (some of which were removed in the previous fall) were all so bad that much grading and change of contour were necessary before the garden itself could even be thought of.

While the gang of workmen and the teams were hard at it with the grading, certain practical difficulties had to be overcome which hadn't been apparent on the plan. The group of Elm trees in the center of the photograph was to be made the terminal point in the garden picture, and, as they were not quite in line with the French windows leading from the drawing room to the paved court which marks the transition from the house to the garden, much planning was necessary to make them appear in direct line. Finally it was decided to allow one tree to remain frankly off line and the curved dry wall was built to relate the new level with the base line of the house.



Planting sketch for the two central groups in the year-old flower garden



BEFORE THE TRANSFORMATION—EARLY APRIL, 1922

In the meantime, the seeds were germinating in the flats and pricked off as the seedlings grew larger into other flats before their next move into the nursery, which was to be their summer quarters. Sometimes, when work presses hard, the mind of the most enthusiastic gardener rebels at the thought of this second flat planting, and you can occasionally, with success, take the lazy man's method and plant the seedlings directly in the nursery. Seedlings thus planted, however, will take infinitely more coddling, whereas those that have been twice transplanted can be moved with a good ball of earth and roots and safely counted on to maintain themselves successfully.

A kitchen knife to cut neat squares of division and a mason's small trowel to lift them are the best implements for dealing with the young plants. It is well to remember at this juncture Mrs. Ely's method, expounded so long ago in "The Woman's Hardy Garden"—"In setting out the young plants

in the nursery, give a small amount of well-rotted manure to each seedling, incorporating it well with the earth before planting." I have found a discreet amount of wood ashes (say one tablespoon) equally successful.

June and July passed quickly and by this time all the seedlings were safely transplanted and flourishing in nursery rows, and the garden itself staked out.

the actual ground. You may want to increase or diminish your perspective or perhaps change your plan altogether, a simple matter when it merely means pulling up a few stakes.

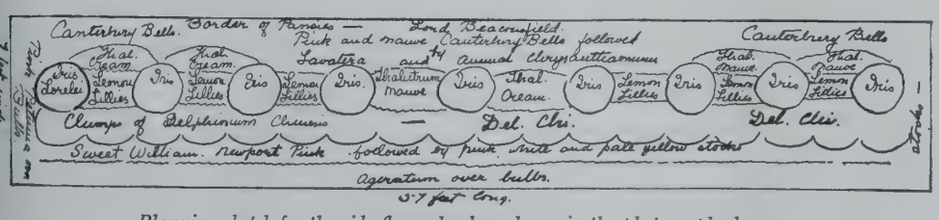
When the plan was finally transferred from paper to earth William Robinson's advice was followed and the ground was dug out to a depth of three feet with the sod and top soil set aside in different piles. When the three-foot depth was reached, the hard pan was carefully worked over with a pick and the sods, top side down, were placed on the bottom of the trench. Then the dirt was sifted before being replaced and, as the soil in my garden is a light, gravelly loam, loads and loads of well-rotted manure and leaf mold were thoroughly incorporated in the soil before it was finally set back in the beds. The wisdom of preparing beds well in the beginning is obvious—thus prepared, they will last in good condition for years with the usual autumn top dressing and summer bone meal and ashes to keep them up to the mark.

And speaking of the Dean of Hardy Gardeners, you can't go far wrong in following William Robinson's advice in most gardening matters. Of course some allowance must be made for the difference between English and American climates—we can't in the North or Middle West, for instance, hope to grow Palm trees in the open as they do in the "sleepy south west" of the British Isles, and it's maddening to have to winter over under glass certain tender biennials, such as Pentstemon, but in the main you can safely do as he tells you in the "English Flower Garden."

THE ACCOMPLISHMENT OF A YEAR—END OF JUNE 1923

Only the trees stood here the previous spring (see photograph on opposite page). In front of the retaining wall are Clara Butt Tulips (pink), with blue Forgetmenot followed by pink Balsam, Heliotropes, with an edging of pale pink Petunia

I HAVE always found it a good plan to stake out a proposed garden and *live with it* for ome days before cutting the sod. The design an be plainly seen if plenty of stakes and hite cord be used, and some sad mistakes may hen become apparent—a six-foot grass path, hich looked wide and ample on paper, may rove skimpy and narrow when developed in



Planning sketch for the side flower borders shown in the photograph above

WITH the soil settling well in the beds, August passed and allowed a certain period for drawing a long breath before the middle of September arrived with the time at hand for renewed activity. All the seedlings now grown to large and healthy plants, were

set out in their predestined places and the garden, so long dreamed of, began to take shape and form.

Most of the plant material used in such a garden can be grown from seed, with the exception of the bulbs and tuberous or fleshy stem-rooted perennials, such as Iris and Peonies and the very important group of the Phlox family. Of course you can order plants from a nursery and thus even produce a garden in three months' time, but if you do you miss a lot of fun and lose the chance of acquiring at first hand fundamental knowledge of each species from germination to lovely maturity.

Among the "indispensables" to make a garden in a year from seed I think my list has run something like this: Delphinium belladonna hybrids, Delphinium chinensis (of which more anon), border Pinks, Sweet Williams, Lupines, Columbines, the three absolutely essential biennials—Canterbury-bells, Foxgloves, and Hollyhocks, Pyrethrum, Shasta Daisies, Forget-me-nots, Pansies, Alyssum saxatile (pale yellow variety), Arabis, Cerastium (the five last named little chaps that bloom along with your bulbs), Thalictrum in white and mauve, Oriental Poppies of the salmon-pink kind, white Valerian, and finally Nepeta, Iris in variety, Peonies and the Phloxes. These last four you simply have to buy. Perennial Phlox never comes true from seed, Nepeta seed isn't listed and you must get plants from division—and, while you *can* grow Iris and Peonies from seed, it takes years for a seedling to bloom and therefore can't be considered for a "get rich quick" type of garden like this one.

DO LET me make a special plea for the Delphinium usually listed as D. chinensis—its proper name is Delphinium grandiflorum chinense and it is far too little grown and appreciated in this country. Its charming color and shape, its delightful habit of continual and profuse bloom from July to September, its wonderful value for mass color in the garden—a blue as changing and lovely as the sea with a curious green foliage that heightens the effect, and its usefulness as a cut flower seems a good deal to claim for one plant, but it is true, every bit of it, and the only thing I can think to say to its detriment is that it is a comparatively short-lived perennial. I mean by that it lasts for three or four years and then unaccountably disappears. But it is well worth the trouble to keep up a small reserve stock, and it is in no way as imperative in its demands for yearly attention as our "gloves" and "bells." It germinates readily from seed, which is more than can be said for its statelier, taller cousin—the hybrid Delphinium.

Unless you get fresh seed you can count yourself lucky if you get a 50-per-cent. germination with Delphinium belladonna, and it is one of the few plants from which I would recommend saving seed. If you save your own and plant it when the seed pod has grown brown and open, and the seeds are plump and black and make a sinister rattling sound when you shake the pods, you'll get 100-per-cent. germination and perhaps some heavenly combination of pale blues and mauves that you never dreamed of.

THE bulbs that were ordered for this garden were, of course, Tulips, Narcissi and Hyacinths (the small Dutch Roman type) and the colors were kept to the more delicate shades among the Tulips, running the gamut from pale lavender up to Zulu and La Tulipe Noire and from the white, flushed pale pink in the rose shades to the magnificent Clara Butt. No reds need apply in my garden and even a deep yellow is not permitted to appear. I have kept most of my Narcissi to the pale yellow and white varieties—Sea Gull is a dream, Will Scarlett, Horace and Mrs. Langtry all indispensable. Most of my garden is pink and blue and lavenders with as much white as we can manage to work in—but color is a fascinating and dangerously long subject and this is just a simple account of a perennial garden made in a given time.

And speaking of perennials, Miss Louise Sheldon's book on "Continuous Bloom in America" contains excellent advice to those who are inclined to be a bit top-lofty in their views on perennial gardening. I have heard friends say "I won't have anything but perennials in *my* garden. I simply can't be bothered with annuals." But unless you *will* be bothered, a time is likely to come in the best-planned perennial garden when there is a lamentable lack of bloom between flowering crops, especially toward the end of summer.

In a new garden particularly, annuals are almost indispensable for a second blooming crop after the biennials have reluctantly been pulled up and consigned to the compost heap. Asters, Stocks, Ageratum, Petunias and a host of other willing friends, grown in reserve beds, fill in the gaps with long periods of bloom, and if you want your garden to be a gay procession of flowers from early spring till autumn you really can't be without the annuals.

CLOSE planting is another trick practised by the artful gardener—if you want color mass be prepared to disregard the cautious advice given to "transplant fourteen inches apart." Subtract as many inches from the given number as you dare and as experience has led you to find wise and sheets of bloom will delight your eye, instead of prim spots of color. I think all such cautionary notes must have been written by men, and all women long instinctively to disobey them. At all events, most good gardeners I know of the gentler sex freely confess to doing so.

Some change has already been made in the garden since the first year. A hedge of English Privet (which stands our hard winter and is a darker green than any of the other Ligustrum) has been made to enclose the borders and parterre. A white garden bench fits in the curve under the shade of the Elm trees, and creamy cement urns hold large masses of Hydrangeas instead of the inadequate pots of flowers shown in the May picture. Next year—well that's something to dream about this coming winter.

Helping to Make the House Comfortable

Things the handy man about the house ought to know

STORM windows outside the regular window sash in shady locations, and especially in positions exposed to prevailing winter and storm winds, keep the house much warmer, less drafty and effect a very noticeable saving in the coal bill—often as much as 25 per cent. Metal weather strips on windows and window frames perform practically the same service in winter and ensure an easy, even-sliding window at all seasons of the year. Moreover they do away with the labor of putting on, taking off, and washing storm windows and occasional glass breakage.

MIND THE PAINT!

PAINT preserves the wood and prolongs the life of a house. To keep a white house looking fresh and clean it should be painted every two years. Darker colors will often last three years or more. Certain items of the trim, such as gutters, balustrades, column bases, moldings, etc., which collect dust and are stained by water drainage, require painting before the body of the house. Going over them with a single coat of paint the second year will often freshen up the whole house for another season.

Mattie Edwards Hewitt, photo

HOME OF MISS ANN THOMPSON

Bryn Mawr, Pa.

The stone steps and the luxuriant planting of shrubbery and vines gives the effect of a retaining wall that makes a delightful setting for this home where architect and gardener have worked in a remarkably sympathetic fashion

PERFECTION IN THE LITTLE HOUSE

PLANNING THE HOME BASEMENT

PHIL M. RILEY

Seemingly a Prosaic Business Though Quite Essential and Withal Interesting

EDITORS' NOTE: *In previous articles on "Perfection in the Little House" Mr. Riley has discussed "Equipping the Kitchen for Easy Housekeeping" (September, 1924, pages 39-41); "Planning and Equipping the Bathroom" (November, 1924, pages 184-185); and "Indoor Lighting Fixtures of Character" (December, 1924, pages 258-260).*

THE demand for more features of utility, comfort and pleasure in the home, together with the present high cost of building, are leading to the utilization of basement space for purposes to which formerly it was not considered well suited. Concrete construction has made this possible. The dark, damp, dusty and cluttered single-room cellar of our fathers has gone the way of the dark, dusty and cluttered open attic and is rapidly giving place to the light, dry, clean and orderly basement of several rooms for special purposes common to the well-planned houses of to-day. In such a basement there is no waste space. Every square foot of floor area is made to provide something conducive to the well-being of the family.

Far too often in the past the planning of the home basement has been almost if not entirely neglected by the prospective home-builder and even his architect, yet the basement comprises a whole floor of the house and a vitally important one. Indeed, it has become a very important place, housing as it usually does the heating plant; fuel storage; laundry; vegetable, preserve, and canned goods storage; service meters and hot water heater; and often a garage, workshop, game or recreation room. To locate them rightly and conveniently in the available space requires the same intelligent planning to scale as for any other floor of the house. No haphazard arrangement will give permanent satisfaction.

BASEMENT plans are susceptible of as infinite variety as first-floor plans; in fact, are dependent upon them. The size and arrangement of the first-floor rooms determines the size and shape of the available basement area and influences to a considerable extent the location of basement windows and doors, as well as the ways in which the space may be conveniently divided into rooms for various uses. For purposes of illustration and discussion, therefore, a fairly common and popular type of modern Colonial house has been chosen. It is a two-story, hip-roof structure having a rectangular floor plan with a sun porch and basement under it at one end and an open porch with no basement under it at the other end. This provides a main basement 24 by 36 feet to be divided into rooms and a separate adjoining room under the sun porch 10 by 20 feet.

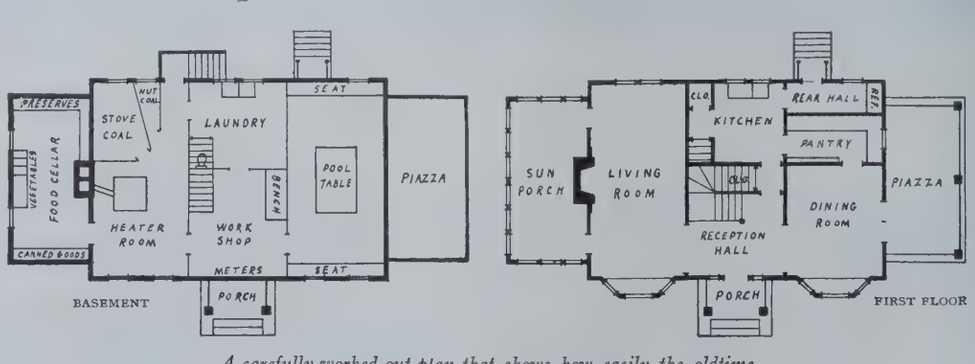
Most foundation walls and basement floors are now of smooth-finished concrete, and when properly waterproofed and the walls whitewashed afford a dry light basement. It is a wise custom to have the floor slope slightly from all sides toward a drain cock located either in the center of the floor or near the front or back wall midway of its length. This drain cock is piped into the sewer and may be opened to prevent flooding of the basement due to bursting pipes or any unforeseen outside cause. It also makes it easily possible to wash down the basement floor occasionally with a garden hose if that is desired. Lathing and plastering over the floor timbers insures a cleaner, lighter and better looking basement and does much to keep the main floor of the house warmer.

So much for the general construction; the partition of the basement space now becomes our chief concern. Two important determining factors have to be considered in doing this. In all except a few relatively small areas of this country a heating plant must be depended on for home comfort from four to seven months of the year. The location of the heating plant and of the basement stairway from the first floor therefore form the basis on which to work. First-floor arrangement determines the position of the stairway, which thus becomes a fixed quantity in the basement plan, as in this instance, where it comes down conveniently into the central section of the basement.

A little more latitude is possible regarding the location of the heating plant, although fairly well established practice governs that also. With hot water or steam heat there is not quite the necessity for locating the heater nearer that side of the house exposed to the prevailing northerly winter winds as with a hot-air furnace, because the heat can be forced with greater certainty wherever wanted. Maximum fuel economy is more likely to result, however, when the heater is placed on the northerly side of the center of the basement so that the pipe lines will be shorter on the colder side of the house. The position of the chimney is also another determining consideration, as a long smoke-pipe connection with the heater is undesirable, and the chimney itself is usually located primarily to serve the living room fireplace or kitchen range.

THE accompanying floor-plan shows a house having an all-gas kitchen and only one chimney with two flues serving the living room fireplace and hot-water boiler. This locates the heater at the northerly end of the basement, which fact, together with the approximately central position of the stairway, become fixed considerations in working out this basement floor-plan.

Dirt in the basement usually comes mostly from coal and ashes. It follows that a clean basement may be had in two ways; either by relegating the heating plant and coal supply to a separate room shut off from the rest of the basement, or by adopting oil as fuel, thus eliminating all flying coal dust and ashes. Oil burners have been much reduced in price and improved in operation. While the oil bill is about the same as the coal bill for any given house, there is a distinct gain in automatic control. The fuel feeds itself; the thermostat regulates it and controls temperature; there are no ashes.



A carefully worked out plan that shows how easily the oldtime cellar may become the play room and the work room of the house

But to return to our subject, even with an oil heater there are numerous reasons for preferring a separate heater room. It improves the appearance of the remainder of the basement if nothing else. With a coal heater it is the only way to keep the remainder of the base-

ment clean enough for other purposes. The house shown in the accompanying plans is supported by two heavy timbers twelve feet apart extending from the front to the rear foundation walls, each resting on two piers eight feet apart. Beneath these timbers partitions find a logical place, dividing the main basement into three sections 12 by 24 feet. The partitions may be of matched boards or wall board against 2 by 4 studding, the wall board being more quickly and easily erected.

It will be noticed that the basement section at the northwesterly end of the house embraces the heater room, coal bins, space for ash barrels and wood for kindlings and fireplace. Two windows at the front and a like number at the rear provide good light. A door near the foot of the stairway connects it with the central section yet prevents the circulation of dust about the basement. Batten type doors will answer here and elsewhere, though glazed doors help to make a basement lighter as do windows in the partition walls, especially in cases like this where porches each end of the house and midway of the front limit the possible number of basement windows.

The heater stands opposite the chimney and conveniently near the coal bin, which is located beside two windows through which coal may be chuted direct from trucks on the garage driveway outside, thus saving the extra charge of 50 cents or more per ton for basketing coal from the street. With an all-gas kitchen only one bin for one size of coal, usually stove size, is required, but when the kitchen is equipped with a coal range, a second bin, as here indicated, is needed for nut or pea coal. If the chimney draft is strong, fuel economy and better temperature control are secured by using 25 per cent. or more of this smaller coal in the heater and many home owners are now firing by this method. For those who prefer cannel coal to wood for fireplaces a third small extra bin is needed. As this coal is almost invariably basketed to prevent undue breakage the location of the bin in the heater room does not so much matter.

Ash cans stand along the wall opposite the heater and are taken out for emptying through the full height door beside the coal bins, a "little ash man" truck being used to facilitate carrying them up the few concrete steps usually necessary below the average grade of the back yard. The four-foot square areaway at the foot of the steps outside the basement door is surrounded by a concrete retaining wall and has a concrete floor provided with a drain into a dry well of stones near by, corresponding to the drainage arrangements for the conductor pipes of the house.

A door connects the heater room with the basement space under the sun porch. Separated as it is from the main basement by a concrete wall, well lighted and ventilated by the two windows shown, two principal uses suggest themselves for this room. With an earth floor it provides an ideal apple and vegetable room where the shriveling effect of too much heat and dry air does not prevail. Shelves about the walls offer a convenient place for preserve and canned goods storage.

WITH a concrete floor and fireproof door leading to the heater room this space provides an excellent one-car garage at the least possible cost. It can be adequately heated in winter at no appreciable extra expense and the cost of an outside garage ranging from several hundred to $1,000, according to construction, is saved. Glazed garage type doors at the rear end of the room flood the place with light. When piped for water supply and with a concrete floor sloped slightly from all four sides toward a drain in the center the car may be washed indoors in winter. Such a garage is especially well suited to a location where the grade slopes away from the house abruptly in the rear. Otherwise a cut must be excavated for the garage drive to the door with concrete retaining walls or turfed slopes on each side.

The central section of the basement serves several purposes in two rooms. The larger of these at the front where the stairway leads down from the floor above provides a place for miscellaneous storage, including garden tools, and a work bench for odd jobs and minor repairs. Shelves or better still a cupboard should furnish a place for tools, nails, screws, etc. Large windows in the partition wall above the bench and of the laundry admit light from the rooms beyond, and this should

A fairly common modern adaptation of a Colonial house which provides generous basement space that may be made to add much to the pleasure of the household

be supplemented, of course, by suitably placed electric fixtures to facilitate work at night and on dark days. At the front end of this room are located the gas, electric and water meters, and the instantaneous hot water heater, now common to all well-equipped homes. There they are easily accessible and will not accumulate a coating of coal dust and ashes as in the old-fashioned open cellar.

At the rear end of the central basement section, directly beneath the kitchen and the two bathrooms on the second floor, and also close to the outside basement door, is located the laundry. There it is well lighted and ventilated by two windows, while its proximity to the other important plumbing of the house reduces plumbing costs to the minimum. The room is of ample size for two set tubs, a washing machine with wringer and a mangle. Opening off from it under the head of the stairway is a water closet for the washwoman or regular maid. To prevent slipping on a wet concrete floor, and to insure foot comfort, a wood floor of planed cypress is laid here on 2 by 4 joists laid on the concrete, the boards being spaced $\frac{1}{4}$-inch apart for drainage of spilled water through them.

If anybody in the family happens to be photographically inclined it is an easy matter to convert such a laundry on occasion into a darkroom. Sensitive plates, films and papers, also negatives, should be sto ed elsewhere, of course.

ALL of the utilitarian purposes ordinarily served by the home basement have now been provided for, yet there still remains the southeasterly section of the basement, a large room 12 by 24 feet, lighted by two windows each on the front and rear ends and reached by a door from the central section. Custom is ever more frequently devoting such available space as this to a game or recreation room which the owner of a small house would probably feel that he could hardly afford to provide upstairs. With a good oak, maple or hard pine matched floor, the walls lined with wall board in panel effect against 2 by 4 studding, and two electric ceiling fixtures installed toward the ends, the room can be made comfortably attractive for a billiard table, dancing or parties of any sort, providing a real little recreation center for the home where social activities of any kind will not at all upset the living rooms of the family above.

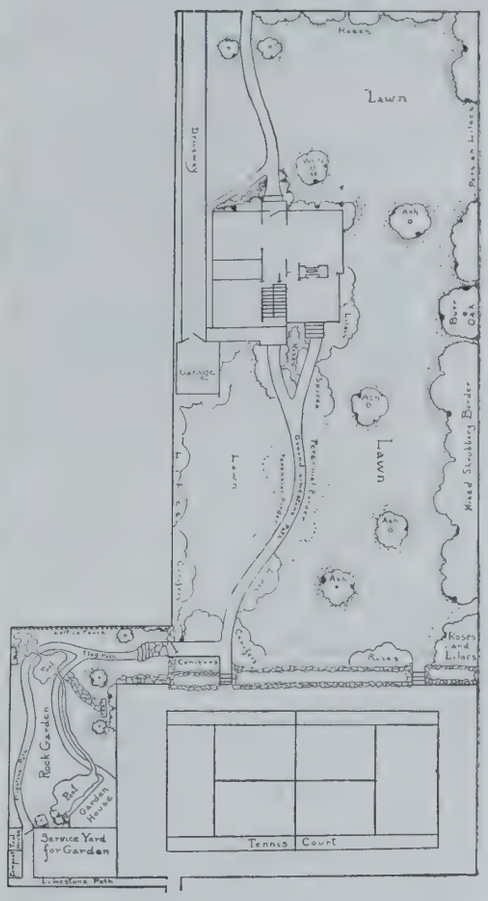
This presents only one basement scheme for one house. Numerous other arrangements might be worked out, and the opportunities of every different house are equally great. Enough has been suggested, however, to show the many advantages and possibilities of a basement divided into rooms which separate the heating plant from the remainder of the basement and make it easy to keep the latter clean for other purposes.

Twelve Months from Vegetables to Rock Garden

ALICE D. and CARL S. MINER

Pictorial Proof of the Possibilities of a City Lot when the owners use Imagination in Planning and Planting

A pool that overflows into a "swamp" where grow plants that like wet feet. The dirt from the excavation for the pool made the "mountain" back of it. Digging this pool was the only work in the garden not done by the owners themselves



A well proportioned archway in the outer wall frames a pleasing vista and emphasizes the garden's perspective

STARTING with only a 30 x 50 foot vegetable garden at the rear of their Chicago home Alice D. and Carl S. Miner have transformed this limited plot into a rockery so skillfully laid out as to give the effect of broad spaces and interesting vistas—making of the house and grounds a harmonious unit.

In a spot where there are no rocks but glacial boulders, it was first necessary to collect the rocks for the garden from the surrounding country. This "fine reverence for rocks" with stepping stone paths, an enclosing wall and arches have made a picture lovely beyond the telling, and one that uplifts the imagination.

The water enters through a rock at the high point, flows down through three small pools, crossing the path to empty at length in the large pool. The middle one of the little pools forms a natural bird bath attracting so many of these feathered friends that they have to wait their turn for a plunge.

AMONG OUR GARDEN NEIGHBORS

Readers' Open Column for Exchange of Comment and Experience

Forty July Standbys for the Indiana Garden

TO THE EDITORS:

Mrs. Cora Jewell, of Darlington, Ind., in a recent letter asked for a list of perennials blooming in July. Since my garden is in the same state, though a little farther south, it may be useful to her to know what blooms here in that month. Excluding all holdovers from earlier months, I have had the following:

1. Leadwort (Plumbago Larpentae). 2. Daylily (Hemerocallis), varieties Kwanso, ochroleuca, Thunbergi, Sir Michael Foster, citrina, and a lovely full yellow, name unknown. All these except the last and Kwanso are very similar, my choice is ochroleuca because its blossoms open in late afternoon instead of in the morning, this peculiarity making it very pleasant to grow near the house. 3. False Dragonshead (Physostegia virginiana), the white form is most effective. 4. Balloon-flower (Platycodon grandiflorum), blue and white. 5. Hollyhock (Althaea rosea). 6. Chinese Larkspur (Delphinium chinense), when sown in the spring, especially the variety Blue Butterfly. 7. Carpathian Harebell (Campanula carpatica). 8. Bellflower (Campanula Grosseki). 9. Rosy Loosestrife (Lythrum salicaria) Perry's variety. 10. Saxifrage Pink (Tunica saxifraga). 11. White Snakeroot (Eupatorium ageratoides); and 12. Blue Boneset (Eupatorium coelestinum), well-known wildflowers, useful in unfavored locations. 13. Greek Mullein (Verbascum olympicum), and Harkness Hybrids. This group includes the most valuable plants for long season of bloom, beauty, or permanence, forming the backbone, so to speak, of the July garden. 14. Phlox (P. decussata), many varieties, should be in this group, could strong vigorous plants be obtained, but this I find impossible of late years. 15. Shasta Daisy (Chrysanthemum maximum, var. King Edward VII), when not infested with black aphis is good for a long period. 16. Blue Flax (Linum perenne), sown in spring comes into bloom this month, but the petals soon fall in hot weather, and one must be out early to enjoy it. 17. Siberian Wallflower (Cheiranthus Allioni), sown in spring and not transplanted. 18. Everlasting Pea (Lathyrus latifolius). 19. Summer Hyacinth (Galtonia candicans). 20. Plume Poppy (Bocconia cordata), no wise gardener will plant this in a small garden. 21. Monkshood (Aconitum Wilsoni), and Spark's Variety. 22. Coneflower (Rudbeckia Newmani). 23. Rosemary Sage (Salvia Greggi), a wonderful color, but not very hardy. 24. Campion (Lychnis Arkwrighti). 25. Japanese Speedwell (Veronica longifolia subsessilis), Spiked Speedwell (V. spicata), and Culverwort (V. virginica); most effective in moist soil and full sun, a combination hard to get in our torrid summers. V. longifolia is most worth the effort. 26. Golden Marguerite (Anthemis Kelwayi). 27. Great Sea-lavender (Statice latifolia). 28. Pincushion Flower (Scabiosa caucasica), for cutting. 29. Musk Mallow (Malva moschata.). 30. Scarlet Beard-tongue (Pentstemon barbatus Torreyi), also P. Blue Bedder. 31. Wild Bleeding-heart (Dicentra eximia), for a shady spot. 32. Sneezeweed (Helenium pumilum magnificum), inferior to other Heleniums blooming in August. 33. Fern-leaved Yarrow (Achillea filipendulina). 34. Swamp Lily (Lilium superbum). 35. Vervain (Verbena venosa), the only plant I have ever had that bloomed from May to October. 36. Redhot-poker-plant (Tritoma). 37. Orange Stonecrop (Sedum kamtchaticum). 38. Sea-holly (Eryngium planum, and E. amethystinum) soon grows shabby in this climate. 39. Mallow Marvels (Hibiscus hybrids). 40. Gland Bellflower (Adenophora Potanini) bloomed through a drought.

Can any of your readers tell me how to raise Hemerocallis from seed? Every year some of the many varieties I grow produce seed, which I sometimes sow and sometimes allow to sow itself, but so far without any results. What special conditions does it need, and how long is its germinating period? And where can I get Clematis tangutica? My collection of catalogues is quite comprehensive but none lists this plant. For any information of these subjects I shall be very thankful.—LAURA JERAULD PAXTON, *Princeton, Indiana.*

—Clematis tangutica was introduced by R. & J. Farquhar of Boston, Mass., and is still listed in that firm's catalogue.—ED.

Vetch As a Garden Flower

TO THE EDITORS:

One of my most charming flowering plants both in the garden and cut for the house is the common Vetch, of the variety which farmers grow to turn under as green stuff. I planted some along a border fence and in one month it grew six feet high. How much higher it would have gone I cannot say for that was the limit of the fence.

At least a yard of stem is covered with brilliant deep purple flowers, more beautiful than Sweet-peas. I pulled several trailing stems dotted with flowers and put them in a tall brass vase, letting them hang over the edge of my desk. They looked like miniature Wisteria vines, and they lasted for several weeks, the buds coming out one by one, so that they were always fresh.

It grows in both sunny and shady spots, finds its own support, needs no care, and is not troubled with bugs. It begins to bloom when three feet high in May and continues all summer—the hotter and dryer the weather, the more it will flower, a rare quality much appreciated by flower lovers.

As Vetch belongs to the legume family, it gathers nitrogen from the air and thus adds plant food to your garden soil. The roots will live over one winter and the border will self-sow if allowed to do so.—MARY A. ROLFE, *Champaign, Ill.*

Still Seeking a Practical Yellow Perennial

TO THE EDITORS:

I have yet to find a practical yellow perennial. The obvious first choice, Coreopsis is an impossible flower. The blooms go to seed faster than you can cut them and scatter themselves everywhere. Anthemis Kelwayi is a vast improvement on Coreopsis, especially in its first feathery growth. But by midsummer, do what you will, it has flattened out on the ground. Left to itself, it will reclothe its naked stalks, but the interval is unsightly. The evening Primrose (Oenothera Youngi) is effective for a fortnight, though frail and later consumed by worms with invariable regularity. The Helianthus are well enough in their season despite that rampant spreading, but are too late. Heliopsis doesn't sucker out, but in some gardens it seeds itself. I have never had a self-sown seedling in mine. The common Heliopsis helianthoides Pitcheriana grows about six feet tall. There is, however, a H. scabra zinniaeflora, a double form that does not exceed three feet. The flowers remain till they turn black and are rather coarse. Something might be done to develop an improved variety, and I am inclined to think that this will be the plant that will eventually fill the requirements of the practical yellow perennial.

A very beautiful, if not the most beautiful flower in the perennial border is Scabiosa caucasica. I have read a criticism of this plant somewhere in which it was accused of being too rampant. For me it is most delicately constituted. I have never seen it in any garden but my own, but assume that it is one of those rare common plants—the reason for its scarcity being doubtless that only one in a dozen of its seeds ever germinate. So

small a showing is likely to be lost in weeds. S. japonica is even harder to grow from seed. I have tried it at least a dozen times. At last, having despaired, I am now raising a crop of promising seedlings from a packet purchased for S. caucasica. Bought plants have always winter killed. I wonder if any one knows anything about it.—JULIAN HINCKLEY, *Cedarhurst, L. I.*

Why have a Grass Terrace?

TO THE EDITORS:

It must be because people do not realize how easy and how beautiful a wall garden is that the grass terrace is so very common. A wall garden is really a terrace with a stone facing, or dry wall laid up on its surface, so to speak. Among the most vivid recollections of my childhood is a grass terrace in northern New Jersey; the summers were hot and dry and in those days there was nothing but a cistern and a fine well to give water, which was very precious, unless indeed it rained, and a heavy rain was apt to wash gullies down the terrace sides. It was a spectacle, always, of despair; just thin, unhappy hay seemed to cover its baked and hideous slope; the owner used fairly to wring his hands over it. And the interest of this reminiscence lies in the fact

A wall garden substituted for the conventional grass terrace in this New Hampshire garden

that it is probably the experience of any owner of a grass terrace.

How many of those owners are sitting complaisantly above a deadly commonplace grass terrace, any one in an afternoon's motor trip may see in countless villages and suburbs. How many of this magazine's readers are struggling to get first the grass to grow, then to get it cut, then to keep the heavy rains from washing it away in little gullies? And with far less trouble and expense than the thing costs in the long run, one may have an enchanting garden, gay with crowding flowers from early spring until late in the summer.

After many years of despair I took a hint from what nature was doing with the old stone walls in a very small and conservative way in New Hampshire—and the wall garden was the result. It was before the fashion for rock gardens had begun in this country, but there were many English books available—probably Miss Jekyll was the source, but so far off that it was only subconscious. There are not many directions to follow in making a wall garden. The wall must "batten back" about 3 inches to the foot; the soil *must* be rammed very hard behind the rocks, and the plants must be laid flat on the rocks as each course goes up so that the roots touch the soil at the back. The rocks must not overhang the plants and it is well to plan very carefully just where one wishes the different kinds to go and *to plant in colonies*. It is also a mistake to plant anything tall notwithstanding Miss Jekyll's recommendation of Yucca. The plants will most of them self-sow—but one *cannot* get plants into the cracks and crevices once the stones are laid up. If one lives in a suburb with very little space, the wall need be only two or three feet high, indeed a one foot slope would give a chance for a hanging garden and do away with grass cutting. Also the town water supply would make possible a perforated pipe laid behind the top row of stones, for use in dry weather.

The spring opens in New Hampshire with Arabis, white; Aubretia, violet and purple; Alyssum saxatile, yellow; Armeria, pink; Phlox subulata, mauve, white and lavender; Veronica repens or V. rupestris deep blue; then the pinks, Dianthus deltoides and the "Cinnamon" Pinks; and the Campanulas rotundifolia, carpatica, and muralis.

The great affair now is to keep our wall in a tidy condition, it is so rampant, so over planted. Still one never knows what a winter may have in store, so one hesitates to pull out too much Campanula rotundifolia. But it is well to remember that rocks are very handsome in themselves and a wall itself is beautiful.

I did succeed in establishing some Alyssum saxatile and Aubretia plants raised from seed brought from M. Correvon's Swiss garden—but on the top row of stones. The wall requires very little care; no enriching, not much watering, but weeding, of course, and very surely, the cutting back of the plants after flowering. That is the *only* way to keep the Pinks in good shape—also Iberis; in fact *all* need to be cut back *hard*. Through cutting back we get the great cushions which, when in good condition, are almost as beautiful after flowering as when covered with bloom.

The Aubretias, Arabis and Armeria keep the wall a tidy, compact *wall* garden; the Pinks and Campanulas in a perfect tangle of rose and blue are most untidy—but entrancing. It is more decorative, more architectural may we say? to let the stones show, to have the flower spots well spaced. But in this garden they have sowed themselves and the Pinks and Campanulas are fairly rampaging. The wall is perhaps twelve years old, and in spite of the intense cold of New Hampshire winters, has stood well. It is given a protection of pine boughs in the winter more to keep the southern sun from burning it. There are now many, many beautiful plants available which were not to be had when the wall was made.—A. N. DAWES.

Some Screen Plants for the South

TO THE EDITORS:

For smaller or narrower screens I am reminded of a very effective instance in Wilmington (N. C.)—English Laurel combined with Abelia grandiflora, and the Golden Japanese Bamboo (Phylostachys bambusoides aurea), the last growing to a height of twenty-five feet, completely screening an adjoining projecting building and giving a perfect setting to the lawn. However, I visualize the forthcoming blooming age of the Bamboo with its immediate loss soon to come.

For a cheap screen the Chinese Privet (Ligustrum sinensis) fills the bill, quickly attaining a height of fifteen feet. With it use Yaupon, Southern Wax-myrtle (Myrica cerifera), both low and Tall Inkberry (Ilex glabra and I. lucida), Glossy Privet (Ligustrum lucidum) Cape Jessamine (Gardenia florida), Thorny Elaeagnus (Elaeagnus pungens), and for variety of flower and habit employ the deciduous Spireas, Forsythias, Weigelas and Winter Jessamine (Jasminum nudiflorum).—J. W. MANNING.

More Poppy Aristocrats

TO THE EDITORS:

Mr. Kerr's pleasantly written article on "Some Rich Relatives of the Poppy Family" (August 1924) has surely found many appreciative readers, and a supplementary note may perhaps be offered concerning two very interesting plants omitted from his little catalogue. There is also, I think, one questionable, though possibly inadvertent, assertion of fact. As consideration of the latter leads by natural progression of thought to the former, it may receive mention first. This is the statement that the Matilija Poppy (Romneya Coulteri) is "the only true shrub Poppy" included in his list. Now in order to constitute itself a true shrub it is generally considered that a plant must possess a *woody* stem, differing only from a tree, indeed, in the purely comparative feature

of failing to attain arboreal habit. I have no specimens by me at this writing, but I do not think my memory fails me in the assertion that Romneya does *not* possess a woody stem. In spite of its elaborate growth, its tissues are herbaceous, and it is as a perennial herb that it is treated in the majority of our botanies. If it were only a smaller and more delicate plant, there would be no possibility of confusion. It is only its imposing habit which causes the trouble by giving it the practical value of a shrub in our gardens.

The species referred to is not the only Romneya we have in southern California. There is yet a second, R. trichocalyx, easily to be recognized by its coarsely hairy sepals, whereas those of the common species are smooth. In England, where both species are grown and cherished, the second is now coming to be held in higher esteem than its better known congener. Culture is similar in each instance.

Irises and Peonies are very aptly called "busy peoples' flowers" for they unconsciously grow in beauty though left severely alone. (Mrs. A. McKenny's garden, Dixon, Ills.)

Another Californian member of the Papaveraceae, which is considerably less frequently seen in gardens than Romneya Coulteri, but which is worthy of much greater attention than it now receives, is the California Tree Poppy, Dendromecon rigidum. This, by the way, *is* a true shrub, in fact the only Poppy or "Poppywort" with which I am familiar, that possesses a woody stem. Growing in the dry washes and on chaparral-covered hillsides, we find it decked in late spring and early summer with a wealth of clear yellow blossoms not unlike those of Hunnemannia in general appearance, although the foliage is markedly different. In cultivation it often grows better and flowers more profusely than in the wild. It is naturally a somewhat straggly bush as a rule, but it does not seem to mind free exercise of the pruning shears and can readily be kept in shape by their judicious use. At this distance from my records I cannot refresh my memory as to the natural geographical limits of this species, but I have often collected it in the hills back of Stanford University, on dry mountain sides and washes near Redlands and San Bernardino, and close to the coast in the vicinity of Oceanside, where numerous fine examples occur along the automobile highway. As it climbs well up into the Upper Sonoran chaparral of the San Bernardino Mountains, it *ought* to prove a somewhat hardier species than either of the Matilija Poppies, though of course in actual practice this need not necessarily follow. The "Encyclopædia Britannica" states that Dendromecon grows to about three feet high, but it is often much more than that.

Those who care for annuals should not miss trying still another dainty Californian species of this same family, the delicate Platystemon californicus or Cream-cups. With the various species of Eschscholtzia, Romneya, Argemone, Platystemon, Dendromecon, and others, among them even a Meconopsis and a Papaver, California is indeed affluent in her possession of varied and attractive Papaveraceae.—S. S. BERRY.

Busy Peoples' Flowers

TO THE EDITORS:

I am sending you some pictures of the Iris and Peonies growing in our garden of which we are very proud. We call them busy peoples' flowers for they stay in the ground not having to be set out in the spring when there are so very many things that must be attended to. When it is time up they come and how they grow. We know we will have flowers too beautiful and big.—MRS. ALBERTINE MCKENNY, *Dixon, Illinois.*

Gordonia in New Jersey

TO THE EDITORS:

We have been very much interested in the illustrations of the Gordonia altamaha on page 167 of the November number of the GARDEN MAGAZINE & HOME BUILDER.

We have one specimen of this shrub between 9 and 10 feet high, and it has bloomed regularly for the past 3 or 4 years. From this we have propagated a number of plants which are now about 4 feet high. Our plants are growing in an acid peat soil, similar to that in which we are growing Blueberries, and they certainly thrive under these conditions.

Has your tree at Garden City had any special care in the preparation of the soil, or is it growing under your ordinary soil conditions? Has your tree proven perfectly hardy in its protected location? We notice some winter-killing of the small tips on our tree in its very exposed location. These are quite noticeable for a few weeks in the spring, but drop off soon after the leaves come out. The tree seems to suffer no ill effects, but blooms profusely in the fall.—JOSEPH J. WHITE, INC., *Whitesbog, N. J.*

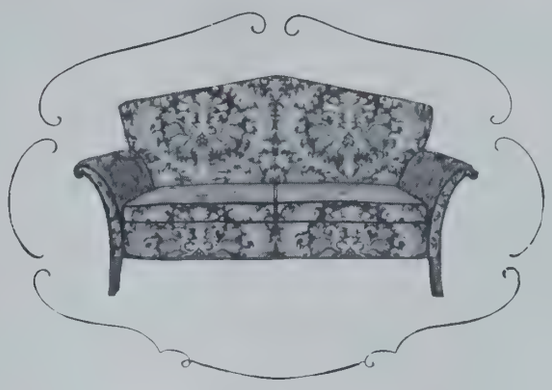
—The tree at Garden City has had no special attention. Our soil is naturally gravelly, rather than peaty. Cuttings root readily if taken with a "heel" in January and put into the greenhouse. There has been some slight winter killing occasionally but it has not given us any concern and does not seem to bother the tree at all.—ED.

Flowers in Kansas

TO THE EDITORS:

I was very much pleased to see "Among Our Garden Neighbors" two from Kansas who have learned that flowers will grow in Kansas as well as back East or in California, if they are but given a fair chance. Kansas needs no apology. Some of her people may as they are too much taken up with making record crops of wheat and corn and very little to making home and garden beautiful and livable. I am enclosing pictures of my Lilium auratum, second year; and my garden of seedling perennial Phlox representing all the wonderful coloring of that hardy plant with its continual bloom from last of June until frost; and a hedge of Marsh Mallows.—L. C. HORST, *Newton, Kansas*

—For all of which we are grateful indeed. The photographs confirm the words but are not suitable for reproduction.—ED.



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Kills Ants with Gasoline

TO THE EDITORS:

To kill ants, pour a quart of gasoline down the hole, and tamp it shut with a broom handle. One reason that ants can not be drowned out is that they place the galleries in which the eggs and food are, higher than the main gallery. The pressure of the air keeps the water from rising into the side galleries, but, as the vapor of gasoline is lighter than air, it reaches every part.

This is the way we killed a nest of red ants which we had fought for three years. I think they were Argentine ants, for they cut all the leaves from a young Honeysuckle five times, and carried them into their nest; they kept clipping the leaves from a Rose bush until they killed it, and they even started to work on the Chrysanthemums, but one application of gasoline finished them. An acquaintance told us that these ants attacked his father's orange grove in Sonora, Mexico, and they had to keep a fire burning over their nest for several days to kill them.—NELLIE S. COWLEY, *Douglas, Arizona.*

Late Bloom in the All-Season Garden

TO THE EDITORS:

I see the gorgeous pictures of other gardens and smile. What sort of a showing would some of them make a week later? The show garden is good, but the every-day garden, made to come as near the show garden as possible, seems to me to be better.

I hope all our all-season flower gardeners are in position to profit by the late flowers such as I can see out of my window this first day of November. The Phlox, Asters, Gladiolus and the many other summer plants are only a trace, but now come on the Calendulas, Anemones and Chrysanthemums. The Pentstemons, Dahlias and a few others have stayed all summer, and as we, near the lakes have had no frost yet, the garden is really showing more color than it did a month ago. These late-fall plants really take up very little space in summer. A clump here and there, enough to make a showing when Cosmos and other late-summer bloomers subside. We have about ten varieties of Chrysanthemums and shall get more and possibly try to raise some one-flowered plants next year.

My "prescription" for Chrysanthemum raising is simple; strong and very rich soil, pull up all but about five stems, top them when about a foot high, pick off all the one-sided and maybe a few other buds when half grown. I used to think I could not raise them, but it is easy now. Sometimes early frosts catch them, but not usually. Though the garden is now pretty full of color I would like to learn of others of more late-fall bloomers, besides the ones I have mentioned.

I am making this request because to me a flower garden should last with not much letting up from Crocus to Chrysanthemum. With more than 150 genera in my list, not to mention the resultant hundreds of species and varieties, I am still looking for more. It is not so very difficult and I am not boasting, for I know a garden with three or four times the sorts that I have and it is not a very large one either.

Some people love flowers because they love color. Many of these would just as soon disfigure a plant or tree in robbing it as not. Why not correct this robber instinct by cultivating a love of the plant as well as the color it produces?—JOHN W. CHAMBERLIN, *Buffalo, N. Y.*

Some Problems for Flower Lovers

TO THE EDITORS:

Have any of the Garden Neighbors experienced any difficulty with Oriental Poppies? I have purchased several complete collections, but with the exception of the Mammoth Scarlet Goliath, which is easy, they all rot after the first year. I have tried the Mahonay, Salmon-pink and Perry's White in different soils from light to heavy and full sun to light shade and with and without winter mulch but I find the crowns rotted in the spring.

Have any of the Garden Neighbors tried out Doctor Coville's aluminum sulphate treatment for Rhododendrons, Azaleas, and Whitesbog Blueberries? All the above heaths, plus Arbutus, Daphne Cneorum and native Orchids are thriving for me in rather neutral garden soil without special preparation except aluminum sulphate and a mulch of pine needles.

Why is not Magnolia glauca more generally planted? Here, in the mountains of Northeast Pennsylvania it thrives to perfection and is a delight to the eye and nose as well, in fact they are the most valued plants in my garden. A winter temperature of 23 below zero has not affected them in the least and they succeed in sun or shade and in moist or dry soil but are native to the former. They should be planted in spring and not in the fall on account of spongy roots, otherwise they are easy.—GEO. H. BEDFORD, *E. Stroudsburg, Pa.*

The Propagation of Bulbs in California

TO THE EDITORS:

In the last August issue of GARDEN MAGAZINE & HOME BUILDER you ask for facts and figures on the subject of interest, of course, to all garden lovers and one which will be in the lime light for some time to come through the operation of "Quarantine 37". While this does not at present cut off our supply from abroad of Tulips, Hyacinths and Narcissus, they may in the near future be denied entry, hence those who have been successful in producing first class stock in this country will be able to come forward and fill all the orders, but from the observations made by the writer in various parts of California, Tulips and Hyacinths grown year after year deteriorate and are inferior in every way to imported stock. Hyacinths and Tulips have short stems and in many cases flower down near the bulb. The Tulips get "streaked" and get this bad habit much more defined every year. During the years 1915 and 1916 the writer was able to observe the bulb trials of C. C. Mo se & Co., in their trial grounds at Hayward, California, and here growing side by side were comparative trials of bulbs secured from all the leading bulb growers of Europe and they had been left in since 1911 and year by year they were not growing better and better but weaker and weaker which seems to indicate that our climate does not satisfy.

The foregoing remarks, it must be noted, refer to the Hyacinths and Tulips only, as we must admit that the genus Narcissus seems to take more kindly to our golden state, and acres of these are grown very successfully here, and very fine bulbs of Daffodils, Narcissus and Jonquils may be grown especially in Alameda County, and Freesias multiply by the million and have made Santa Cruz County famous the world over. Crinums, Amaryllis, Gladiolus, Montbretia, Ixia, Sparaxis, Tritonia, and Watsonias are among the bulbs that can be propagated with success, but although I have made observations here for ten years I have yet to see local grown Tulips or Hyacinths replace those imported and although considerable money has been invested in experiments and in bulb farms in the northern part of the state, few of these are on the market or are likely to supply the demand.—ALBERT R. GOULD, *Santa Barbara.*

A New Kink for the Compost Pile

TO THE EDITORS:

Last winter, as I raked up the bushels of dead leaves my trees shed, I dumped them in the chicken yard. After they had remained there five or six months the rains and the constant scratching and tearing of the pronged feet that are so disastrous in a garden had reduced them to fine fragments. Then I piled them up in alternate layers with sifted ashes. The ashes permitted the rain to percolate readily to the bottom of the pile, and in consequence the decay went on rapidly, so that in another month I had a mass that was practically sand and humus ready to use in my fall planting, less than a year from the time the leaves were green on the trees. A compost pile is nothing new, but I don't remember to have read about getting the chickens, who are such pests on the wrong side of their wire fence, to hasten the work of disintegration or about using ashes instead of earth for the alternate layers. I burn briquets, the ashes from which seem particularly sandy, but no doubt coal ashes of any kind would serve. One of the contributors to William Robinson's "English Flower Garden" writes: "The more I garden the deeper I get my drainage and the fuller of sand and fiber my soil." Soil that is naturally sandy would of course need only the leaf mold, but a large proportion of gardeners have to contend with soil of the other kind, which needs just what this combination provides.—BERNARD H. LANE, *Washington, D. C.*

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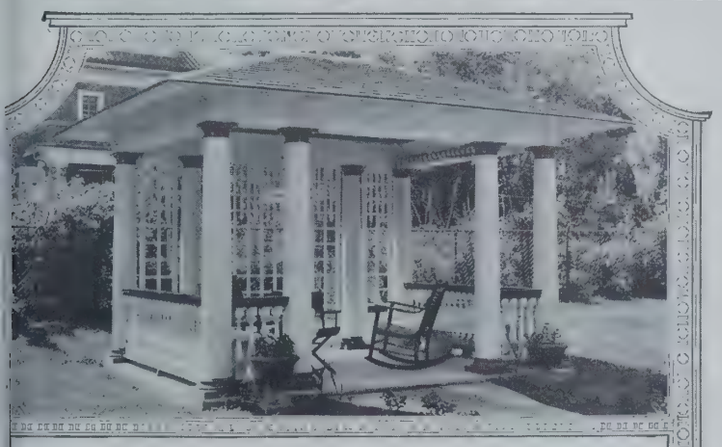

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With their many opportunities for restricting the sale of laurel, Christmas greens and all wild flowers, the members of this organization can and will materially aid the National Garden Association to preserve our heritage of natural beauty.

LIVING CHRISTMAS TREES

EVERYWHERE the plan of preventing the ruthless cutting of Christmas trees is growing and spreading and one of the most beautiful as well as practicable plans is the planting of living Christmas trees. We have told before the work of the Des Moines Garden Club which for two years has urged each resident to plant an evergreen tree. At Christmas time these are lighted, presenting a wonderful effect and bringing to Des Moines very justly the name of "The Christmas Tree City."

BILL BOARDS BEAUTIFIED

THE interest in the Billboard Restriction movement is rapidly spreading throughout the country,—small towns now becoming active in this work as well as the cities. In St. Thomas, Ontario, and in Detroit, Michigan, the signs themselves are being beautified. Placed only in commercial positions as screens to hide objectionable spots, with grass plots and shrubs planted in front of them, lattices and climbing Roses at the sides and top, these boards have become ornaments and of genuine service quite apart from their use as advertising media.

On Staten Island the South Shore Protective Association has swung into line, and its members are endeavoring to put an end to the practice of tacking advertisements on the trees along the highways. The Commissioner of Parks has forbidden the nailing of political campaign posters on the trees, a most important step. This is part of their plan to make this a spot of beauty by having a chain of parks across Staten Island.

One of the most gratifying phases of all the work for lovely gardens, civic beauty and community betterment is the interested and hearty coöperation of business houses and commercial organizations. Everywhere boards of trade, chambers of commerce, banks and stores are joining in and frequently are instigating this work, realizing that no town is any richer than its poorest part.

From South Bend, Indiana, comes a story of this kind,—of work done by a bank,—The First National. In 1923, this bank, aided by the Union Trust Company, advocated holding flower shows. Four were held that year and the result of this has been a city-wide awakening to the value of lovely gardens and homes and streets. This interest in civic beauty has penetrated to every quarter of the city. "Over 50 prizes were given during the flower shows this past season, this indicating the number of exhibits and the interest taken," writes Mr. Arthur L. Hubbard, President of the Bank. Mr. Hubbard also calls attention to the fact that many of the prizes were given for the most artistic flower arrangement, "the school children being adepts in arrangement when once their attention was called to it." The results of what these business men are doing are beyond estimate.

WHY NOT A NATIONAL FLOWER?

MRS. JOSEPH R. ELLICOTT, President of the Garden Club of Halifax County, at Ormond Beach, Florida, has sent to us for publication a most interesting leaflet written by Mrs. Edwin F. Sweet who advocates the adoption of the Columbine as our National Flower. Mrs. Ellicott has had two hundred and fifty of these leaflets printed for garden clubs that are interested in this suggestion and who desire a copy.

Mrs. Sweet's reasons for selecting the Columbine are all set forth and, briefly, these are as follows:

The flower chosen should be a native of the United States, growing naturally over a large portion of the country and susceptible of general cultivation without particular skill in floriculture. It should not be harmful to man or beast. It should be graceful and easy of artistic arrangement. It should be in blossom on at least one of our great national holidays. It should be a flower of such individuality of form that conventional representation of it on any kind of material would, like the Fleur-de-lis of France, be easily recognized, regardless of color.

We have one flower according to Mrs. Sweet that meets all these requirements and has many symbolic meanings in its favor—the Columbine. It grows wild in some form or other in practically every section of the country, can very easily be cultivated in any garden, and in most parts of the country is found in blossom on the Fourth of July, when a very partriotic decoration of these flowers can be arranged, as they include red, white, and blue, as well as many other beautiful colors. Some kinds bloom nearly all summer in this climate. It is not harmful to man or beast.

The name Columbine suggests Columbus and Columbia, being derived from the same Latin word. The word "columba" means "dove" and the petals are considered by many to resemble a circle of doves. They would be symbolic of the dove of peace. When you examine this beautiful flower carefully you will also find that each separate petal is a tiny reproduction of the liberty cap worn by our Goddess of Liberty. The general shape of the entire flower suggests the Liberty Bell.

Added to these symbolic reasons, the Columbine is strong and hardy, like our race; graceful and artistic as the most aesthetic could desire, it bravely climbs the mountains, flourishes in the crevices of rocks far beyond the reach of man, endures the first frost and cold of our northern winters and nods and sways in the sweltering sun of the South.

The National Garden Association believes that the nation should have a national flower and urges that every garden club take up this matter with Mrs. Ellicott to the end that some decision may be reached on a question that has been ineffectively debated for so long a time.

SPECIAL BULLETINS OF INTEREST

THE following bulletins are free upon request to the National Garden Association, Garden City, Long Island:

Constitution, by-laws and Program for Garden Clubs. An Enemy to the Greenhouse Rose. Flower Shows. Gardening in the South. Insect Enemies of Chrysanthemums. Plans for Rural Community Buildings. Pruning. Rural Planning. Use of Rural Community Buildings. Greenhouse Heating.

ELLEN D. WANGNER Secretary.

National Garden Week for 1925 to be observed April 19th to 25th.

THE FINEST GUARANTEE

Get our catalog before you make your spring plans. A post-card brings it.

that the buyer of seeds, trees, plants and shrubs can possibly find is in the Storrs & Harrison reputation, gained through seventy-one years of co-operation with amateur and professional gardeners and nurserymen.

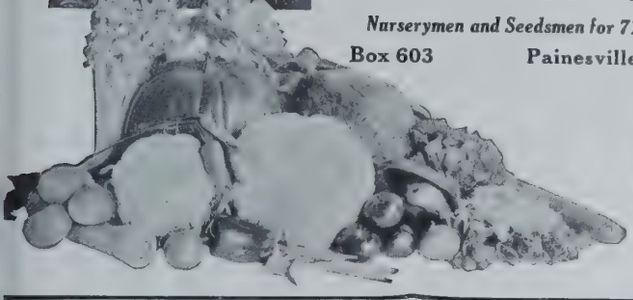
The S. & H. Co. Free Catalog

for 1925 illustrates and describes time-tested seeds, dependable and prolific—plants and shrubs that thrive lustily—fruit trees that bear abundantly—and shade trees for every purpose. Our 1200 fertile acres afford you unusually wide selection and enable us to fill your orders with only the most desirable specimens.

THE STORRS & HARRISON CO.

Nurserymen and Seedsmen for 71 years

Box 603 **Painesville, Ohio**



VAN DUSEN Dwarf Fruit Trees

Here is a letter from one of our enthusiastic customers.

Read what he says:

E. Lansing, Mich.

Mr. C. C. McKay, Mgr.
Van Dusen Nurseries
Geneva, N. Y.

Dear Mr. McKay:

We are very proud indeed of our little trees in blossom time and when bearing fruit, and enjoy having our friends see them as they are quite a novelty and rare sight to many.

Very sincerely,

C. W. Loring

Dwarf Apple Tree, Scarlet Beauty
(See adjacent letter)

Our customers send in pictures of these trees because they are pleased!

We Specialize in

Dwarf Apple Trees
Dwarf Pear Trees
Dwarf Plum Trees
Dwarf Cherry Trees
Dwarf Peach Trees

They are big bearers of big fruit from small trees. They bear younger and need less room. They are the best trees for the home garden.

Our FREE catalogue will tell you about them, also our roses, vines and ornamental shrubs. A postal brings it to you.

THE VAN DUSEN NURSERIES

C. C. McKay, Mgr. **Box G, Geneva, N. Y.**

The Best Seed Catalogue for 1925—
MICHELL'S

DESCRIBES and illustrates the best varieties in Flowers, Vegetables, Bulbs and Plants. Color plates of the newest originations, including the two wonderful new Dahlias, **Calvin Coolidge, Jr.** and **Florence Michell.** Not just a catalogue, but a helpful book of 192 pages, which can make success in your garden easier.

Includes most every proved aid for the flower and vegetable garden. Dependable fertilizers, insect destroyers, weed eradicators, garden and greenhouse tools and implements, and poultry supplies of all kinds.

GRASS SEED HEADQUARTERS FOR OVER 30 YEARS

—close specializing has enabled us to develop a perfected mixture for every lawn, pleasure ground and field condition. Our catalogue tells how to solve your every lawn problem.

Write to-day for this catalogue. **Mention this advertisement** and take advantage of these **SPECIAL OFFERS** to *Garden Magazine and Home Builder* readers.

American Beauty Asters

Longer, heavier stems than on Late Branching Asters, bearing flowers of 4 to 5 inch diameter.

Lavender .....15c. pkt.
Shell Pink .....15c. pkt.
White .....15c. pkt.
Crimson .....15c. pkt.

One pkt. each, all four, value 60c..... for 50c

Giant Snapdragons

(*Antirrhinums.*) Spikes 2 to 3 feet in length, with monster flowers in rare colors.

Giant Garnet .....10c. pkt.
Giant Pink.....10c. pkt.
Giant Scarlet .....10c. pkt.
Giant White.....10c. pkt.
Giant Yellow .....10c. pkt.
Giant Brilliant Rose ....10c. pkt.

One pkt. each, all six, value 60c..... for 50c

Michell's Giant Dahlia-Flowered ZINNIAS (*Illustrated above*)

Sensationally large flowers, measuring 4 to 6 inches across, resembling decorative dahlias. Distinctive new colors:—

Crimson Giant, largest red....20c. pkt.
Golden State, Orange yellow ..20c. pkt.
Oriole, orange and gold bicolor.20c. pkt.

One pkt. each, all three, value 60c..... for 50c

Special Group Offer

all three of these collections, 13 pkts. in all,

Value $1.80, to Garden Magazine and Home Builder Readers for **$1.00**

Attach $1.00 bill to your request for catalogue, get this rare bargain. (Postpaid anywhere)

HENRY F. MICHELL CO.

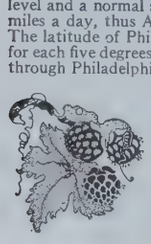
520 Market St., Philadelphia, Pa.

GARDENING FOR THE BEGINNER

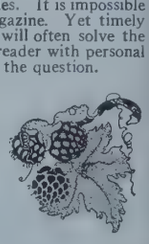
THE MONTH'S REMINDER—JANUARY

As to Time and Place: In gardening practice a date can only be approximated as seasons vary and local conditions will have some influence. Generally the latitude of forty degrees at sea level and a normal season is taken as standard. Roughly, the season advances or recedes fifteen miles a day, thus Albany would be about ten days later than New York (which is latitude 40). The latitude of Philadelphia is a week earlier. Also allow four days for each degree of latitude, for each five degrees of longitude, and for each four hundred feet of altitude. Latitude forty passes through Philadelphia, Pa.; Columbus, Ohio; Richmond, Indiana; Quincy, Ill.; Denver, Col.

How to Use This Guide: Suggestions as to the most important things of the month are given in this department so as to "remind" the gardener of the current duties. For routine details of such things reference should be made to standard handbooks and guides. It is impossible to make a complete manual of practice in each number of a periodical magazine. Yet timely articles will be found elsewhere in each issue, and references to back numbers will often solve the immediate question. Moreover, the editorial staff stands ready to help any reader with personal advice by mail. A self-addressed stamped envelope should be enclosed with the question.



Who Writes This: The advice and instruction in this department are the gleanings of many years experience in practical gardening matters by competent amateurs and others who have "been through the mill." The contributions are made from various sections of the country: for example, Mr. Jesse A. Currey contributes from Oregon; Mr. Theiss from Pennsylvania; Mr. Henry Gibson from Pennsylvania (formerly from New York); Mr. Sherman Duffy from Illinois; Mr. A. Kruhm from an extensive Eastern acquaintance; and, in addition, occasional notes from elsewhere and by the editorial staff and associated contributors of experience.



NEW YEAR resolutions are as useful for the gardener as they are for other folks. And always the genuine gardener makes them. Each year he resolves that he will do better than he did the preceding year. The surest way to carry through his resolution is to make an actual plan of his prospective garden, a blue print, as it were, to guide his construction work. And the best time to make the blue print is right now, when the snow lies deep and the winds howl about the chimneys, really heightening, by contrast, the cosiness and cheer within. So let us draw up our chairs before the fireplace and plot out the garden.

The best way to do this—I know, for I have tried various ways—is to take a large sheet of tough paper that will not tear readily. Wrapping paper is admirable for this purpose, because it wears well. A large sheet should be used, and the garden be plotted to scale. One half of an inch to a foot is a good scale. Thus, if one's garden is fifty feet square, the sheet of paper should be 25 inches square.

First of all, one will need to determine what to plant. All the old favorites will be there, of course. Let me urge you to try at least one new vegetable each year. That will add tremendously to your pleasure in gardening. When your selections are made, it is easy enough to lay off your rows.

BUYING SEEDS EARLY

WHEN everything is planned out and your garden plotted, you can at once order your seeds. Then you will be ready to start your "dirt farming" the instant the weather permits. Next to the fun of dreaming over a "paper garden" comes the joy of handling the packages of seeds. Time after time one looks them over, always glowing with keenest anticipation of pleasure. Silas Marner got no more pleasure out of his nightly fondling of his gold, than the true gardener gets from handling his packages of seed.

WHY "PAPER GARDENING" PAYS

PERHAPS the greatest advantage of "paper gardening" is that it enables one to plan intelligently for succession crops. Your plan calls for fifty feet of early potatoes. They will be planted at about such and such a date and will mature in so many days. What are you going to put into that fifty-foot space after the potatoes are lifted? Your seed catalogues will help you solve the puzzle.

But to make one's chart really worth while, one must do more with it than merely draw the plan of the garden. By making the chart large, one has room for notes. Thus, in addition to jotting down on each row the names of the crops to go in the row and the dates of planting one should also put down from time to time notes as to the actual behavior of the various crops, and of one's gardening operations. Thus if one has two rows of a vegetable, it is possible to treat the two rows in different ways and note down the results. Or one can treat the two halves of one row differently. Here is where the advantage of having a tough paper for the chart comes in. One can take it to the garden and make notes on it there, if it is desired. At any rate, when winter comes again that chart, now covered with notes, has become a regular Odyssey. It tells how many parasangs the gardener covered, day by day, and month by month, during his journey from radishes to turnips. Better yet, it provides invaluable data for use in planning next year's garden. So when you make your garden New Year resolve this year, go a little farther and make a chart of your garden.

GETTING GARDEN SUPPLIES IN HAND

NOW is the time to be getting in all your garden supplies. Too many of us stop with seeds when we should go on and lay in the other essentials. It is almost as necessary to have your spraying material on hand early as it is your seeds. You will need at least three sorts of spray material, and possibly more. You should have lime-sulphur or miscible oil for scales, bordeaux for rots and wilts and blights, and tobacco extract for aphids—these or their analogues in the ready made preparations which are often more convenient. Order now, before the rush. If you have the materials on hand, you will be pretty sure to apply them when needed. If you wait until spraying time, you will be almost certain to miss some of your sprays. Ordering your spray materials now may make the difference between a successful garden and one that is not successful.

While you are laying in supplies, get some fertilizer in hand. In spring retailers and wholesalers are rushed with business. Shipments are often slow. Sometimes one has to wait for days before one can secure what one needs. So order now. A sack of soda nitrate, and another of a balanced fertilizer, are the best sort of crop insurance.

TREES AND SHRUBS FROM CUTTINGS

NOW is the time to start collecting hardwood cuttings. The intense cold of February sometimes injures the new wood. Cut in January, this wood is almost certain still to be unharmed. Almost all vines and most shrubs can be grown from cuttings. A good practice with cuttings is to cut them into proper lengths—at least six inches long—and tie them in bundles and pack the bundles in damp sawdust. I have found big crocks admirable for holding cuttings. A four or five gallon crock will contain a large number of cuttings. All the average gardener can use. These should be plunged deep in the damp sawdust, but the butts should be allowed to project in the air. This calluses them and facilitates quick rooting in the spring.

OR, PERHAPS IT'S A GRAFT

SCIONS are of course exactly like cuttings, but it is not desirable to have scions callus. So the entire scion should be kept in the damp sawdust or moss, or whatever is used. Of course all these bits of wood must be stored where it is cool enough to prevent growth. A very successful grafter I know—a man who each year grafted thousands of little trees—kept his scions in old gun powder cans. The cans contained damp sawdust. When a can was filled with scions, the orchardist put the cap on tight, making the can air tight. Then he kept it in cold storage. His scions kept perfectly, and his grafts always grew.

For some reasons February pruning is preferable to pruning done earlier. It is nearer the time when growth starts and wounds will begin to heal sooner. On the other hand, wounds made now will callus better and callusing seems to be a necessary preliminary to healing

(Continued on page 342)

Fence with PAGE *for* Protection

PAGE FENCE is a handsome, lifetime barrier that will protect your property, encourage its development, and make you the real owner of your real estate.

The super-heavy zinc coat on PAGE Fabric is smooth and uniform—an assurance against rust for years to come. Ask the Page Fence man near you to furnish plans and estimates—write for his name and address, and for illustrated booklet, "Fences for Protection and Beauty." No obligation—a postal card brings it.

Page Fence & Wire Products Association
219 N. Michigan Chicago
Distributing Wire Link Products for the Page Steel & Wire Co., associate company of the American Chain Co., Bridgeport, Conn.

Fence with PAGE *for* Beauty

About a Special Rose Food

DOESN'T it strike you as just a bit funny, that any of your rose loving friends will tell you all kinds of things to do for the care of roses, as to spraying, watering and so on, but when it comes to the fertilizer, they invariably say, "give them plenty of enrichments"? Or "Bone Meal is good."

Yes, but give them plenty of what?
Or, why should roses be content to continually gorge themselves on Bone Meal, which contains only two of the 5 foods they positively must have to thrive at their best?

All of which is why we started working with a hundred or so rose experts to work out as nearly perfect a Rose Food as possible.
The results have been decidedly successful.

Its name is Springfield Rose Food.
Sold by most dealers and seedsmen.

A dollar's worth is enough for 10 roses the season through.
If your dealer doesn't happen to have it, we will sell it direct to you at their prices.
Send for the Rose Food Circular and get full particulars.

American Chemical Specialties Co.
SPRINGFIELD, NEW JERSEY

SPRINGFIELD PLANT FOODS

A Border of Perennial Lupines

GIANT PASTEL SNAPDRAGONS

Rare Art Shades
for your 1925 garden

SUPREME IN SIZE and form—even more distinguished for their new and rare pastel colors—are Elliott's 1925 selections in easily grown garden flowers. Old favorites bred to size and beauty hitherto undreamed of. Just as easy to grow as the commoner forms but infinitely more lovely. Available in limited quantities only for 1925.

Elliott's Giant Pastel Snapdragons. Newest and largest of all, 'Snaps"; unique and most artistic in coloring. Old gold, pastel rose and lavender, warm terra cotta, russet and coppery tones. Thickly clustered blossoms on mammoth 3-foot spikes. ideal for cutting. Pkt. 35 cents.

Elliott's Sweet Scented Lupines. Delicate, enchanting perfume and a wealth of soft harmonious shades distinguish this famous strain. Hardy perennials, thriving in full sun or partial shade. Frequent cutting prolongs the blooming period from May on to early fall. Tall spires of pink, rose, sky blue, amber, fawn and artistic bicolors. Pkt. 50 cts.

Elliott's Violet Blue Balcony Petunia. One of the most superbly colored flowers we have ever seen—a lovely deep shade of pure violet blue—rare in flowers of any kind and absolutely unique in Petunias. A mass of big, velvety blooms from early summer to late fall. Pkt. 25 cents.

Elliott's Mammoth Pastel Zinnias. The largest strain of Zinnias ever developed and the most beautiful. Not the raw, glaring colors of the familiar types but softer pastel combinations of salmon, rose, lavender, old gold, burnt orange, deep crimson and violet. Flowers often 6 inches across, with deep, full centers. Sensational in every way. Pkt. 40 cts.

Send for This Book

Elliott's "Flower and Vegetable Gardens" for 1925 describes all of the finest varieties of flowers, including many valuable new introductions. Makes garden planning interesting, easy, and resultful. Free to all who are interested in fine gardens. Write for it today.

SPECIAL OFFER
One full size packet each of Elliott's four new Art Shade Selections for 1925, postpaid } **$1.25**

Supply limited; please order early

ELLIOTT NURSERY COMPANY
Established 1889
501 Magee Building
Pittsburgh, Pa.

Remember the part *hardware* plays . . .

BETWEEN the pleasant gesture of its portico and the actual welcome of your home will stand a door. And whether this will be harmonious with the whole, or merely a door, depends largely on the hardware you choose.

From Sargent Hardware of time-resisting brass or bronze you can select handles, knobs, escutcheons and fittings which best harmonize with your home *throughout*. Security will also be assured—built into the sure-acting, lasting mechanism of Sargent locks, probably the finest ever made for inner and outer doors.

Hardware is too important to leave to chance; too small a part of the total building cost to make "skimping" pay for the certain regret. Write for the Sargent Colonial Book and with your architect choose the best of hardware for all of your home.

SARGENT & COMPANY, *Hardware Manufacturers*
48 Water Street New Haven, Conn.

SARGENT "520" DOOR CLOSER

This small door closer is one of the greatest conveniences used in the modern home. It closes doors that should be closed, silently and surely, and keeps them shut. Controls storm doors in winter, screen doors in summer, and the hall lavatory, back-stairs, cellar and refrigerator-room doors the year round. It is inexpensive and easily applied.

(Continued from page 340)

But I have found one advantage in early pruning not commonly mentioned. Early pruning helps to protect trees from rabbit injury. Rabbits are plentiful where I live, and often do much harm to trees in winter. When I prune my trees and throw the prunings on the ground around the trees, the rabbits often eat the prunings and let the trees alone. What they want is the tender bark on new wood. They get that in the terminal twigs in the prunings. Hence they do not harm the older, tougher bark on butts and trunks.

Do not forget to prune the Currants. I believe more Currant bushes fail because of lack of pruning than from any other cause. The old stems should be cut away. This will force the growth of thrifty new wood, and it is on these thrifty new shoots that the best and biggest currants are borne.

SPRAY MATERIALS

WHEN ordering spray material, don't forget two very important articles for use on currants—nicotine solution for aphids and hellebore for the larvae of the saw-fly, the so-called currant worms. Fruit tree leaves curl up when the aphids attack them. Currant leaves do not. Instead, they suffer from reddish blisters, and look puffed up like a person who has been scalded. A good dose of nicotine, sprayed on the under sides of the leaves will rid them of plant lice quick. So get the material on hand, ready for use the moment the first red blister appears on the currant leaves. The hellebore should be dusted on or sprayed on at the first sign of worms.

KEEPING FRUITS

IF YOU did not wrap any fruit in paper when you laid in your winter supply, do it now. You will need to pick over your apples from time to time, to look for decaying ones. Pick out some of your best fruit and wrap each piece separately in paper. This will lengthen the life of the fruit considerably. If an apple starts to rot, the rot does not then spread to every apple in the barrel. By wrapping good keepers thus, one can have fruit late in spring.

BORERS IN YOUR ORCHARD?

IF THE winter keeps open hunt for borers in the fruit trees, and at any rate be prepared to rout them when spring opens. As I happen to have several hundred trees to worm spring and fall, I use a little grubbing hoe especially made for the purpose by a blacksmith. It is like an ordinary grubbing hoe, but smaller, with a short handle. Where many trees are to be examined, a kneeling cushion is needed. I carry an old burlap bag stuffed with others. This protects the knees from the cold ground. The little mattock or grubbing hoe is used to draw the earth away from the trees. A sharp knife is the best instrument for cutting out borers, but a pliable wire is also indispensable for running into burrows that cannot be penetrated by a knife blade. It is advisable to cut away all dead bark and mutilated wood, no matter how large a wound is made. Then the tree can heal up. But if much bark is cut away, the exposed wood should be waxed or painted.

Look over each tree critically for tent caterpillar eggs. These eggs are in gummy bands, like little chunks of chewing-gum, stuck about the smaller branches. These bands harden and become brittle. They are coated with a waterproof material that sometimes makes them glisten. When the leaves are gone, these egg cases are easy to see. By removing and burning them, the gardener will save himself trouble next summer.

"MUMMY" FRUITS CARRY DISEASE

KNOCK down and gather all the "mummies" from fruit trees at the same time you are searching for tent caterpillar egg cases. These are the dried remains of decayed fruits. They are mostly found on stone fruit trees and contain spores of brown rot or other diseases. To leave them on or about the trees is to insure a renewal of the disease the next summer. Remove and burn.

TAKE STEPS TO PROTECT FROM WEATHER

TREES can be treated to prevent winter freezing. This occurs when a warm day in winter is followed by a cold night. The tree bark becomes snappy during the day. At night it freezes and

(Continued on page 344)

And Now a Glass Garden for So Little as $1,650

FOR so little as $1,650. you can now secure the complete materials for a house 16 feet wide and 33 long.
A house having a goodly sized garden plot, and its own snug little work room.

A house fully equipped with benches, ventilating apparatus, and a complete heating system, outfitted with no less than a genuine Burnham greenhouse boiler.

The frame is entirely of steel.
The wood is the best of cypress.
All materials are given one coat of a special greenhouse paint before shipment, and an ample quantity furnished for two more coats when the house is up.

Here then, is one of the finest little all around Glass Gardens money can buy.
We are frank in stating, that it has no equal for the money.

It can be built alone; attached to your garage; or directly to your residence.
Some are buying them for winter play places for their children, where they can romp in the sunshine all the glad day long. Therein, may also be a thought for you.

Glad to send you a circular giving full particulars of the house and its equipment.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

EASTERN FACTORY
Irvington, N. Y.

WESTERN FACTORY
Des Plaines, Ill.

CANADIAN FACTORY
St. Catharines, Ont.

IRVINGTON
New York

NEW YORK
30 E. 42nd St.

CHICAGO
Cont. Bank Bldg.

PHILADELPHIA
Land Title Bldg.

BOSTON
Little Bldg.

CLEVELAND
1304 Ulmer Bldg.

DENVER
1247 So. Emerson St.

KANSAS CITY
Commerce Bldg.

ST. LOUIS
704 E. Carrie Ave.

TORONTO
Harbor Comm. Bldg.

GREENSBORO
N. Carolina

MONTREAL
124 Stanley St.

BUFFALO
Jackson Bldg.

Harris Blue Butterfly DELPHINIUM

(*Delphinium Chinensis*)

A Beautiful Cornflower Blue

A hardy and unusual Delphinium that blooms the first year from seed sown in the spring in the open ground. It starts blooming the first year in July and the following years much earlier, and continues all summer. It grows 1½ to 2 feet high in bush form and is covered with bloom from ground to top. Beautiful for cut flowers or in the garden. The plants need no protection and will do well in any good soil.

We can also furnish a White Butterfly Delphinium of the same type as the blue. They are particularly handsome when grouped together.

SEEDS THAT WILL GROW

Blue Butterfly, - - Pkt. 10c
White Butterfly - - Pkt. 10c
A packet of each for 16c in stamps

Our new catalog of Harris Vegetables and Flowers, illustrated in color contains many interesting and unusual suggestions for your garden. We will gladly send it free on request.

We are large growers of Vegetable Seeds, Flower Seeds, Gladiolus, Dahlia and other bulbs and many flowering plants. Our catalog offers you the opportunity of buying seeds of a very superior quality direct from the grower at much less than city seedmen's prices.

It will pay you to ask for the catalog today.

Joseph Harris Co., Morcton Farm
R. F. D. 3 Coldwater, N. Y.

Harris Seeds
for your Flower and Vegetable Garden

STUMPP & WALTER CO.

Announce

THE publication of their 1925 Spring Catalogue, one hundred seventy-six pages devoted to the needs of the garden.

New and rare varieties of flower and vegetable seeds, summer-flowering bulbs and plants. A comprehensive list of insect destroyers and various fertilizers.

If you have not been receiving our catalogue we shall be pleased to send you a copy, on request—issued January 1st.

Stumpp & Walter Co

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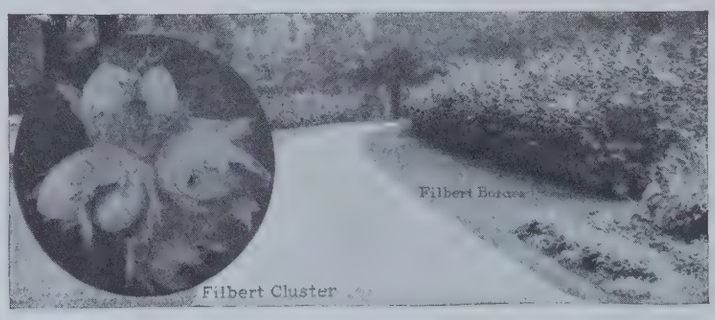

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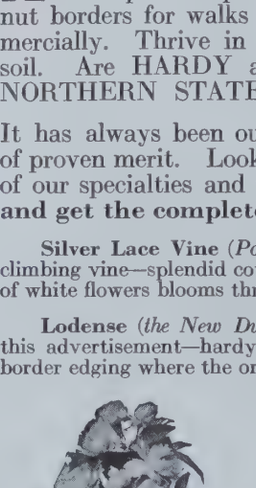

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L. W. HALL COMPANY Inc.

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Send for Free Catalogue of

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(Continued from page 342)

bursts open. Painting the tree with whitewash is a good preventive. Some sheltered locations where trees can warm up quickly may lend themselves to this form of injury. Owners of trees in such locations will be wise to treat their trees.

Orchard trees set in the fall should be staked. Such trees have probably not caught hold of the soil and will not do so until spring. They are therefore likely to he heaved up by frost and loosened so that air will get about the roots. They may even be blown loose.

THE GARDEN INDOORS

ONE of the brightest and most useful flowers to grow in a moderately heated glass house is Primula malacoides. Quite a few persons grow these in their sun-rooms, for they do not require more than 50 degrees of heat, in fact will do better if kept around 45 degrees, thus making them quite advantageous for the average sun-room. The seed should have been sown in July, but as most amateurs need only a few plants the best plan is to buy young plants from a florist or grower. Put them out in the benches of the greenhouse now, or if you want to grow them in pots, in the sun-room, carry them along shifting as they grow until they finally fill a five-inch pot. Never give Primula malacoides excessive heat, but it does like plenty of sunlight. The dainty little flowers are most useful for table decorations, and if taken in hand now will come into flower with Narcissus, Tulips, and Freesias, with which they combine wonderfully well.

GETTING THE BEST OF THE MEALY BUG

MORE than one fine lot of plants in the mixed greenhouse has been destroyed by the mealy bug, yet according to a friend of mine, who is a practical florist the mealy bug can be controlled. The pest will never get a start if proper spraying is done. If the mealy bug makes his appearance, study his habits and it will be noticed that he follows up the new growth, start war on him as soon as he is seen, using in the afternoon a nicotine-fine oil combination spray. The next morning wash off the plants with clear water to dislodge the bugs. With one or two such treatments you can rid the greenhouse of this pest. Some of the new concentrated contact insecticides may be used if more convenient.

JANUARY IN THE CALIFORNIA GARDEN

CONTINUE planting fruit trees, shrubs and Roses, under favorable conditions of weather and soil. January planting is particularly advisable in the dry interior regions of California, as it increases resistance to the heat and drought of summer. If the ground be not too wet, spade all empty beds and borders, fertilize and leave the soil rough and uneven for exposure to the air and sun, and to prevent the rains from packing the ground.

The following bulbs may still be planted: Agapanthus, Allium, Anemone, Ranunculus, Crocus, Hyacinth, Ixia, Lily-of-the-valley, Montbretia, Narcissus, and Tulips. Plant Gladiolus bulbs from now on, once a month until summer for succession of bloom.

Tuberoses (Polianthes tuberosa) may be divided or planted this month. Put them in light soil, twelve inches apart, in a sheltered situation in all coast regions and keep well cultivated, stirring the soil after each watering. Being natives of Mexico they thrive best in the south and in the interior valleys, and may be left in the ground all winter; but in the cooler coast regions they should be taken up in June after blooming and replanted early in the year.

Rose cuttings may be made now and set out in the open ground. Also cuttings of Hydrangeas and of Fuchsias. Take the latter from the ripened wood and plant in a light soil of leaf mold and sand. When well rooted, plant in the shade and keep watered. Cut back the old plants to start new growth, and if thrip be found, spray the under side of the leaves with whale oil soap. Fuchsias thrive best in the coast regions where summer fogs prevail.

Ivy should be pruned in January as the new leaves appear in February.

GARDEN MAGAZINE & HOME BUILDER

Vol. XL, No. 6 — *FEBRUARY, 1925*

Mary H. Northend, Photo.

"Enter, wee sunbeams, doff your gilded caps and enter.
*Sandaled with silence, come into this quiet place. * **
Here we have put exotic beauty to entice you—
You who may dance in dream-tinged gardens at your will—"
Violet Alleyn Storey

A somewhat unconventional style of glasshouse construction but one which is well adapted to the needs of the man or woman who gardens indoors for the sheer fun of the thing and who wants to grow all sorts of plants. Calla, Christmas Cactus, the Umbrella Plant or Cyperus, Begonias, Vinca, Geraniums, Ivy, various Ferns, Climbing Roses, and an Orange tree make a bright jumble of greenery and bloom above the brickwork

"Up through cold earth they thrust sleepy heads,
Sweet like a rose, snow-clean, and docile
As children just out of their beds"
Amer Pindar

There is something rarely poetic about the Christmas Rose (Helleborus niger), its almost poignant loveliness of aspect, its brave appearance through the snows. Of mid-winter birth, it seems both a memory and a promise, holding the breath of summers fled and summers to come; above all a signal of hope, a symbol of earth's benignity beneath its chill cloak. A practical flower, too, as well as poetic; fragrant, and when picked and brought indoors endures for many days despite the sharp change from cold to heat. (Photograph by J. H. Dawson)

"My walls outside must have some flowers,
My walls within must have some books;
A house that's small; a garden large,
And in it leafy nooks,"

William H. Davies

The garden has laid pleasant hands upon the house here at Pinebloom, the home of Mr. and Mrs. Preston Awkwright, Druid Hills, Atlanta, Ga. English Ivy touches the upper windows; Bay trees flank the entrance; Dogwood, Japanese Privet, and Evergreens crowd in mass about the steps almost as if curiosity drew them close to see who should come or go. Such planting makes for friendliness and a pleasant sense of unity between the outdoor world and the shelter within which man shuts himself comfortably away from nature's inclement moods and the sometimes burdensome contact with his fellows

NEWS & COMMENT

THE first number of this publication appeared twenty years ago this month, February, 1895, and it was immediately sold out. The demand for that number from subsequent subscribers who wanted to begin at the beginning justified a reprint of that issue. The new magazine rapidly made many friends of whom a considerable number, we are glad to say, continue with us to this time. To them we extend our hearty felicitations. It is pleasing also to reflect that some of those who were associated together in the preparation of that first number of "THE GARDEN MAGAZINE," as it then was, are still concerned with its preparation and appearance.

Great changes have taken place in this twenty years. The suburbanite development had, in 1895, really hardly begun. To-day the coming of the automobile has made ultra-suburban living a practical thing for a multitude of people who before were of necessity bound to live closer to their activities of the city. So great has been the expansion of the home building idea, with increasing momentum each succeeding year, that we now have a very diversified group of readers. In the beginning the appeal was primarily to those already interested in the possession of homes and the growing of plants round about them; now we join hands too with the more numerous throng who are just commencing to test the twofold joy of country living.

The home and the garden are inseparably associated, and with this larger aspect we step into the new era hopefully, enthusiastically, and joyfully. May we continue to serve our friends in helping them to the greater comfort and better enjoyment of the gardens that surround and embellish—nay form a very actual part of the homes in which they dwell!

"PHILOSOPHY OF FURNITURE"

IT IS amusing to discover Edgar Allan Poe, creator of so many perfectly balanced lines and rhymes, discoursing with most unphilosophical violence upon the "Philosophy of Furniture." Some of his deliciously intemperate statements are too good to miss:

"The Scotch are poor decorists. The Dutch have, perhaps, an indeterminate idea that a curtain is not a cabbage. In Spain they are *all* curtains—a nation of hangmen. The Russians do not furnish. The Hottentots and Kickapoos are very well in their way. The Yankees alone are preposterous."

"A judge at common law may be an ordinary man; a good judge of a careful carpet *must be* a genius. Yet we have heard discoursing of carpets, with the air 'd'un mouton qui rêve,' fellows who should not and who could not be intrusted with the management of their own mustaches."

"Touching pattern—a carpet should *not* be bedizened out like a Riccaree Indian—all red chalk, yellow ochre, and cock's feathers. . . . The abomination of flowers, or representations of well-known objects of any kind, should not be endured within the limits of Christendom. Indeed, whether on carpets, or curtains, or tapestry, or ottoman

coverings, all upholstery of this nature should be rigidly Arabesque."

Whether one agrees or disagrees with the poet's conclusions is, for the moment, beside the point; the real significance of this little essay lies in the fact that the furnishing or, more truly, the mis-furnishing of a house mattered enough to a man like Poe, for whom beauty was the breath of life itself, to rouse his ire and his interest. Instinctively he perceived what psychology has since formulated and familiarized, the importance and power of color; he knew that ugliness depresses the human spirit and loveliness elates, that the things people live among and see around them every day affect character and happiness far more than is commonly supposed. Furnishing the home is not a mere buying of chairs and wool to comfort one's body and keep it warm, it is building a background for one's soul, a place of light and repose and pleasant hues whither, wearied and worried, one may turn from sordid streets and be sure of rest.

Happily, too, since Poe frenzied over furniture close to a century ago, some profit has come to pass—"the Yankees" are no longer "preposterous," not universally, so, at any rate. The "glare" and the "glitter" he so deplored have for the most part mellowed into sobriety; "interior decoration" has become current household coin; nowadays we talk and think more about these things, and thoughtfulness is the forerunner of taste.

THE PARADOX OF GARDENING

PECULIARLY unique is this gardening habit of ours, surely, among the avocations in that the ignorant may be having almost the best of it. This thought is well expressed in an introduction to a recent edition of John Reid's "Scot's Gard'ner" (first published in 1683). "I admit that, when I walk with an expert through a garden, I feel an ignorance, a limitation, which is almost abysmal. But I recollect, after all, that I may be happier of the two. The expert knows all the weaknesses and the shortcomings in his garden. . . . On the other hand the ignoramus walks blandly along enjoying without cavil the simple beauty of the flowers, enjoying what Lord Bacon has so finely called their breath, enjoying all their perfume and all the variety a garden can give without question and without afterthought. If he sees a weed which would distress the expert, if he sees a groundsel growing where it should not grow, he only thinks of his canary, and as for Orchids, when he asks his soul and his conscience, he infinitely prefers a Sweet-pea." Thus Lord Roseberry in the introduction referred to, and he goes on to say comfortingly: "We ignoramuses who know very little about it, can derive a pure pleasure, not merely from the contemplation of gardens, but from the reading of books about them. When people are much wearied by business, I do not know of a better recipe to cheer, and sooth their minds than by taking up one or two books. One is a book about gardens, which if you shut your eyes after reading it, enables you to see the picture before you and to lull yourself with imaginary sights and imaginary scents."

THE LONG-LIVED NELUMBO SEED

THAT one plant at all events will grow from an inconceivably ancient seed seems to be authenticated by a statement published in a recent issue of *The Florists Exchange*. In reply to a question, D. Johnson, Department of Botany, Johns Hopkins University, is quoted as stating that the Japanese botanist Dr. Ohga has raised plants of Nelumbo from seeds "that had been buried in a river deposit for centuries, probably 300 to 500 years." This testimony as to the logevity of Nelumbo seed is now filed for future reference.

OF AN ANCIENT LINEAGE

IT IS almost characteristic of American business that each generation makes a new enterprise for itself, and it is ground for pause when something of a more permanent nature arrests our attention. The Moon family of Morrisville, Pa., is probably unique in its many generationed adherence of the business of horticulture. Since 1767 they have been growing and selling fruit trees and ornamental evergreens practically at the same old stand and the passing away of J. E. Moon in the early days of this year serves but to emphasize this continuity, as others of the family maintain the habitation. The sight of the present-day nursery has other historical association, too, for on the ground stands the old stone building in which Washington rested before the Battle of Trenton. The Moon family, for five generations identified in the nursery business, never had a more thoroughgoing horticulturist than the one who has recently gone from us.

A few skilful touches wrought this transformation from the drab original shown below

IMPROVING THE HOUSE YOU HAVE

I. The Message of the Colonial

HENRY W. ROWE
Architect

Without at all altering its fundamental simplicity of line this old house was raised from dejection to spriteliness and the acme of comfortable living (see above) by skilful improvement. Home of Mrs. Harvey Murdock at Mill Neck, L. I.; Henry W. Rowe, architect

Simplicity a Keynote and Good Line an Essential—Transforming the Merely "Ready-made" Into a Home that Expresses Its Owner

THERE are all sorts of reasons why people buy houses rather than build them—convenience, haste, expediency, lack of imagination or a superabundance of it which delights in twisting ugliness into beauty, quick to see and seize possibilities. Nothing could be lovelier or more truly home-y in character than some of the old farmhouses one occasionally finds gracing the countryside—modernized to meet the more exacting standards of present-day comfort but quite untouched in spirit. They stand, solid signals of hope, convincing the passerby of the practicability of re-creating habitableness, of uniting loveliness with easeful living. No matter what sort of house you have something may be done to redeem it, to better it, to coax it into a closer semblance of "the home of heart's desire." Fundamentally good line makes such accomplishment simpler, of course, but even with a bad start it is astonishing what may be done in the way of a fine finish. Success rests upon a certain ruthlessness toward gingerbread ornament and other extraneous vanities, for beauty seldom finds its way into meaningless excresences; and frequently a shearing-off process must precede the adding-on stage. Then think of your house in relation to its site and surroundings—how strangely out of place the colorful Spanish architecture of southern California on the wind-swept spaces of Long Island, for instance, or the severe New England Colonial among the lush groves of Louisiana. Fitness remains a first requirement of comfort, a final canon of taste, so let your home meet not only your individual needs but the needs of the landscape, too.

Generalization means very little unless backed by concrete achievement and home builders will be glad of the conclusive proof and positive encouragement presented by Mr. Rowe, who as a practicing architect with a number of remodels to his credit, speaks out of the fulness of extended successful experience.—THE EDITORS.

It seems almost inconceivable that the gingerbread-y atrocity shown below could ever take on the unobtrusive beauty of its present shape (see left), but a ruthless shearing away of ugly externals allowed the main body of the house to be properly seen. Home of Mr. J. T. Foster at Greenwich, Conn.; alterations by Henry W. Rowe, architect

ALTERATIONS, if skilful, actually add to the attractiveness of houses, for the reason that they express changing modes of living, one of the strong contributing forces in the development of architecture. Broken rambling houses suggest progress—they are in a way our history. Houses to be remodelled often themselves suggest the particular style to which they are best adapted for alteration and as a great number of these suggest the Colonial some of the essential characteristics of this type will be briefly dealt with.

Good outline is a matter which should have the attention of any home builder, particularly in purchasing a house already built, so that the matter of correct proportions may be disposed of generally before he enters into the attempt of applying the minor touches of detail which lend distinction and individuality.

The question of whether the house is good or bad in shape may be determined by study of what has gone before during the building of our early Colonial houses. These, though shorn of much of their original beauty, and often somewhat desolate, are for our purpose found to be unexpectedly complete. It is necessary to look carefully in order to find these old examples of beauty in the proper proportion of mass. In many cases old country houses were low. Cozy ceiling heights helped to bring down, the roof lines and lean-to roofs bring the eye almost to the ground. The addition of a lean-to roof in a proper setting is, by the way, an idea worth consideration when contemplating the remodelling of a house. Though this decidedly agreeable characteristic has led us to believe that low houses are surer to appeal than those standing high, nevertheless in some of the old work, particularly in and surrounding New York, we find examples of stilted houses with a graceful contour, and it is by no means a foregone conclusion that a house standing high cannot be made pleasing. Its height may readily be brought down, if desirable, by a contrasting low wing which might include the kitchen or the laundry.

The entrance is of essential importance and in the remodelling of a house should have the first attention. There are so many fine traditions and possibilities that there need be no excuse for failing with this particular detail. A house with a monotonous flat appearance may have its façade broken by a hooded effect, either in the form of a gable with a doorway built up of side-lights and fan-light or by a pent roof leaning against the building and supported by two columns, or by a Germantown hood, or even by a lattice treatment. All of these methods are successful in breaking up the plainness of the front of the house and introducing a note which often contributes so completely to the success of a small cottage that the transformation is surprising.

THE treatment and disposition of windows is also most important. The usual Colonial idea was to have the entrance door in the center with one or more windows on either side of the doorway and the second story windows in the same general alignment. This arrangement has become popularly known as the Revolutionary façade and for people who prefer uniformity of exterior rather than irregularity, it is a pleasing and simple one. It is often possible to select a house already built that either has or may be readily adapted to this sort of treatment. The service or kitchen end in a house of moderate size would naturally be placed on one or the other side of this façade. The porportions of the window openings is a question that should receive attention too, as a house of this type should not have long solemn looking windows, but ones of more generous width.

Frequently it is necessary and desirable to have attic windows and when dormers are needed a careful study of examples which are found on many of our early American houses will well repay the home builder. There are the dormers with a gable end including either an arched window or a square-headed window. When the façade of the house is more or less rigid and needs the introduction of a few

curves to soften its appearance it is advisable to use an arched head on the dormer. Where, however, there is sufficient change of motion in the façade, a square windowed dormer is sometimes preferable. The cornice plays a distinct part in the effect of the whole and often some slight alteration of this feature will create a note of interest and bring it into harmony with the rest of the dwelling. Sometimes it is only necessary to remove ugly eaves from a house and treat the cornice in a flat and unpretentious manner and thus make it register. [What may be done in the way of refined beauty is shown on page 380, upper picture of "Jane's Acre," a delightful little house designed by Mr. E. P. Mellon which recreates the austere charm of the Colonial to rather an extraordinary degree.—EDS.]

The question of painting is one which always comes to the foreground. White paint is, of course, recognized as a method of pulling a house together and will often soften an ugly impression provided the house is not covered with inexcusable detail.

Blinds and shutters give a beat-note to a continuous monotony and for this reason the farmhouse type of dwelling is improved by them.

When chimneys are added they should be of sufficient breadth to make them look their part. Very often a house is ruined completely by spindling anemic stacks of brickwork arising from the roof. To exaggerate stockiness is a trick safely resorted to and when a chimney is to be built it is sometimes advisable to make it larger than one would perhaps naturally assume it should be, for the obvious reason that in the days of their origin chimneys were made as outlets for the generous old fireplaces and therefore it was necessary to make them wide. So that even though the furnace has largely superseded the fireplace the chimney seems more convincing when fashioned on the early, sturdier plan.

IN THE interior such details as staircases, fireplaces, and mantels, wainscots, panelling and floor boards add to the general effect. It is essential that, when remodelling along Colonial lines these shall be consistent with early designs and often the simpler they are the better. For example the stair-rail can be built up of plain hand-rail and broomstick balusters or spokes and the effect will be far and away superior to attempted poor elaboration. If the rail and spokes have a hand-made appearance and are not too monotonously exact the result will be all the more pleasing. Generally speaking, this is true of any form of woodwork which grows in interest as it takes on individuality, the impress of man's hands and spirit, rather than the cold formality of mere machine.

With a fireplace, quaintness is often obtained by having it constructed out of simple materials; sometimes only a shelf over a plain frame for the opening is all that should be used. Sometimes a restrained amount of detail may be effectively added. In the facings an effect may be obtained by smearing the brick work with cement and painting the entire facing black. Where a Dutch oven is desired this method is also pleasing. Wide floor boards, such as are often found in old houses, need only to be stained, the cracks filled with marine glue (a black substance used for the caulking of ship's decks) and then waxed. For an added touch of age they may be plugged with black pegs.

Wainscoting and panelling of walls may be done in an inexpensive manner by using wide beaded or grooved boards and nothing else. The rooms of some of our most striking Colonial houses were this and nothing more. It is very easy to get a carpenter to carry out this transformation and such a wall treatment makes a background admirably fitting Colonial pictures, clipper ships, silhouettes, and samplers. An occasional plaster end in such a room is a delightful change.

In the purchase of an old house hewn beams are frequently found concealed behind the plaster. A distinctive note may be given the walls or ceilings by setting the plaster back a trifle, and showing the beams. Such an appeal to the imagination is a reflection of the work of our earliest American colonists who in building their houses set up the frame and filled in between the members.

Irregularities in line, both in interior and exterior, are characteristics to be cherished; for instance, if there is a sag in the roof line do not change it. If there are different levels in the floors inside they ought to be left. There should not be any attempt to straighten and square up everything for as soon as this is done some of the character of the old house is destroyed. Often in the construction of

Hewn beams give a distinctive note reflecting the work of the early American colonists who in building their houses set up the frame and filled in between the members. In a Connecticut home remodelled by Henry W. Rowe for Mr. J. T. Foster (see opposite page)

new houses a wave is given to the straight-away lines so that their rigidity will be softened. In applying trim to a built-over house of moderate cost simplicity is a safe rule to follow. It is sometimes advisable to use battened doors, such as may be constructed by any carpenter as they consist merely of sound boards screwed together with two cleats on the back or toe-nailed with hand-wrought nails as was originally the method. Strap hinges, latches, and rim locks should be used. This treatment of hardware adds greatly to the Revolutionary atmosphere.

The rearrangement of windows, a facing of stone, and a porch have effected a very pleasant transformation. Views of a Connecticut house before and after alteration by Mr. Henry W. Rowe, architect, for the owner, Mr. Eugene M. Moore

THE matter of locality is one of the determining factors to be considered when planning what shall be done in the way of improving the house you have; for it must, first of all, seem to belong to its region, it must not be out of joint with the landscape or countryside in which it finds itself. The old houses—that is, the best of them and with the others we are not concerned because they have only a negative message for us—seem so inevitable, so instinctively a part of the land on which they rest. The austere charm of the Colonial melts into grace as it moves southward from New England into the milder airs of Virginia and her sister states, and on occasion even displays an agreeable playfulness, is humorously expressive of the character and whims of the owner.

Whatever the style selected as being in best accord with your environment and as exemplifying your personal predilection, stick to it and let consistency run through your plans so that alterations and original will carry a sense of purposeful unity without which building has no meaning or beauty.

WHERE THE GLADIOLUS GOT ITS SPOTS

FORMAN T. McLEAN
Plant Physiologist, Rhode Island Experiment Station

Photographs by the Author

The Heritage of This Summer-flowering Bulb from Primitive Types That Graced the Gardens of Ancient Greece and Colored the Cape of Good Hope—Successive Steps in the Admixture of Stocks Rapidly Developing a Fitting Perfection of Color and Form for the American Garden

THE improvement in the Gladiolus really started about 1750, after the introduction of some of the hundred and fifty or more species of south and central Africa, and progress has gone hand and hand with the botanical exploration of the Dark Continent, yet how many of the admirers of the stately modern Gladiolus know of its long history, and whence it obtained its wide range of colors and markings?

Some of the simplest forms were found in the ancient Greek gardens at the dawn of European civilization. These earliest cultivated sorts were natives of southern Europe and of the Near East, and are called Corn-flags. But the European and Asiatic species, of which there are sixteen, found little favor among gardeners, and they were developed but little beyond their wild state. A few of them are still occasionally grown, such as the Common Corn-flag (Gladiolus communis), and the Byzantine Corn-flag (G. byzantinus) both of which have small purple flowers, with a white stripe through the center of each lower petal. White, flesh-colored, and pink variations of these and allied species were perpetuated in cultivation, but little improvement was made in either the size or form of the flowers, which remained small and narrow petaled.

First Glimmerings from the Cape

THE first of the African Gladiolus were brought from the Cape of Good Hope during the early part of the eighteenth century, and were early blooming, slender forms, adapted to grow during the mild, moist winters at the Cape, flower early in the spring, and lie dormant during the hot, dry summers. Many of these species, such as the Fairest Gladiolus (G. blandus), the Narrow-leaved Gladiolus (G. angustus), and the Wing-flowered Gladiolus (G. alatus), have bright colored, wide open flowers. A few of them, the Violet-scented Gladiolus (G. recurvus), the Large Brown Africander (G. grandis) and the Sad Gladiolus (G. tristis) are pleasantly fragrant. One of the finest of these early introductions is the Superb Gladious (G. cardinalis), a tall red late-flowering species from the moist mountains of the Cape region. These forms throve in the mild climate of England and southern Europe, and were easily hybridized, giving rise to a group of fall planted, early flowering varieties, useful for bedding and for forcing early cut flowers. They are not hardy in the northeastern United States, though popular in California, under the name of "Baby Gladiolus." Most of the cultivated varieties of this dwarf type have wide open, star shaped flowers, with oval, dark-bordered, white or pale-colored blotches on the three lower petals. In color they range from white, to pink, red, and purple, and are borne on short, slender, often curved spikes.

MAID-OF-THE-MIST (Gladiolus primulinus) AND TWO OF HER OFFSPRING (¼ size)

This graceful Gladiolus (above left) from Victoria Falls in tropical Africa is the latest of the wild species to be widely used in hybridizing. Its quaintly hooded blossoms are reproduced in many of its descendants as, for example, in Primadonna (center) which carries the typical nodding, bird-like flowers widely spaced on a slender spike. Alice Tiplady (right), though a descendant of Maid-of-the-Mist, has lost many of the characteristic earmarks. Its slender stalk and delicate salmon color are derived from the type primulinus but the form of the flower is quite new and distinctive—an indication of what may be expected from the second and third generations

The Ghent and Nancy Strains

BOTANICAL exploration extended around the Cape to the East coast of South Africa, into the region around Natal, and with new conditions quite different plants were found and brought to Europe. This region, with its southeast summer monsoons, has a warm, moist summer and comparatively dry winter; thus permitting of rank summer growth of vegetation. Consequently many of the Gladiolus from there are tall, vigorous growers, with long spikes of many flowers. When these were crossed with one another and with the earlier forms, they gave rise to a new race of large, summer flowering varieties.

The first of these late blooming varieties was the offspring of a cross between two Natal species; the red and yellow flowered Parrot

Gladiolus (G. psittacinus) and the white or pale pink, tall Opposite-flowered Gladiolus (G. oppositiflorus). This surpassed both its parents as a garden flower, having many well opened, bright red flowers on a tall spike. It was named, from its place of origin, the Ghent Gladiolus (G. gandavensis), and was the forerunner of a race that was of prime importance for nearly half a century, from 1842 to 1890. All the best modern types of Gladiolus have been developed from this parent stock.

The yellow-centered red varieties still abundant in old gardens get their coloring from the Parrot Gladiolus, and the yellow throat blotches in many of the modern pink and red varieties probably come from the same inheritance. The other parent of the Ghent Gladiolus, the Opposite-flowered Gladiolus, is a tall grower, often four or five feet tall, with long spikes of as many as forty flowers. The pink-tinted white flowers are in two crowded rows, facing in opposite directions—an arrangement peculiar to this species and one which still occasionally crops out among modern seedlings. The white flowered varieties get their coloring from this species, and both the tendency toward dark lines in the throat and toward erect, pointed petaled flowers may be traced to it.

Another species which contributed conspicuously to the advancement of the Gladiolus was the Purple-spotted Gladiolus (G. purpureo-auratus), likewise from Natal. That able French plant breeder, Victor Lemoine, found this species to be hardy at his home at Nancy, France, and crossed it with the best of the Ghent sorts; producing hardy seedlings, having the bell-shaped flowers, with large, yellow-bordered maroon blotches on the lower petals, and widely spaced on long slender stalks, as in the Purple-spotted Gladiolus. Early in the development of this strain, Lemoine intercrossed it with the Butterfly Gladiolus (G. papilio), another Natal species, which has markings similar to the Purple-spotted Gladiolus, but a different color, the petals being pale purple, instead of yellow, and the blotches on the lower petals reddish purple, with yellow border. From this cross he obtained sorts ranging in color from lavender and purple to almost blue. The Lemoine type of Gladiolus was introduced in 1880, and is still prized in Europe for hardiness and rich colors. Nearly all of the dark blotched modern Gladiolus and the blue and purple sorts are descendants of this strain.

American Adoption of Childsi

AT ABOUT the same time, a newly introduced Cape species, the Saunders Gladiolus (G. Saundersi) was used in hybridizing with the existing sorts, both by Max Leichtlin of Baden Baden and by Lemoine. The Saunders Gladiolus is bright scarlet, with a great blotch of white, spotted with red in the throat. The flowers are few, but large and wide open, the petals being strongly recurved at their tips. The hybrids accordingly developed huge, wide open flowers, and many of them had the bright scarlet color of their parent.

Leichtlin's hybrids with the Ghent varieties were not popular in Europe, and before being widely disseminated, they passed into the hands of John Lewis Childs of Floral Park, N. Y., who introduced them, as the Childsi strain, about 1893, nearly twenty years after Leichtlin began developing them. The varieties then offered were of such outstanding merit, because of their large, showy flowers and tall vigorous growth, that they attained immediate popularity.

Meantime, Lemoine had crossed the Saunders Gladiolus with his earliest Lemoine hybrids, producing a similar strain of large flowered Gladiolus with large throat blotches, marked with dots or stripes of contrasting colors. These he called the Nancianus or Nancy Gladiolus. Both the Nancianus and the Childsi sorts were so far superior to all of the older kinds that they created a sensation on both sides of the Atlantic. They are so similar as to be practically indistinguishable, and they constitute the foundation stock of the modern florists' type of Gladiolus.

The Modern Primulinus

THE latest important species to be used in crossing is the tropical Maid-of-the-Mist Gladiolus (G. primulinus) from Victoria Falls; a small but vigorous and productive species,

FOUR STAGES IN THE DEVELOPMENT OF THE GLADIOLUS

From left to right they are: (1) The Dragon's-head Gladiolus (G. dracocephalus) a wild species. (2) A Lemoine hybrid; its large velvety throat blotch, slender stalk, and widespread, bellshaped flowers are inheritances from the Purple-spotted Gladiolus. (3) An old sport of the Ghent type; its narrow trumpet shape and large number of closely crowded flowers in two rows facing in opposite directions come from the Opposite-flowered Gladiolus species. (4) A Childsi variety with large, wide-open flowers and finely penciled throat, inherited from the Saunders Gladiolus from the Cape. This strain was the forerunner of all the fine American Gladiolus of to-day. The sort pictured shows in its light-colored, dark-flecked petals the influence of its Opposite-flowered Gladiolus parentage

THE GLADIOLUS DISPLAYS FASCINATING DIVERSITY OF FORM AS WELL AS COLOR

The types pictured above are all shown ¼ natural size and running from left to right are: (1) The Parrot Gladiolus (G. psittacinus), a wild species and a parent of the modern forms. Its tall spikes, bearing many deep red flowers with yellow centers made it a popular garden flower during the early part of the last century. (2) Shakespeare, one of the best of the Ghent type, much resembles the Opposite-flowered Gladiolus in its pink flecked white color and tall, many flowered spike. The rounded, lily-like form probably came from another species, the Many-flowered Gladiolus. (3) America, though an old sort, is still one of the best. It combines the large, open flower of the Childsi type with the number of open flowers and rounded, lily-like form of the Ghent type. (4) Desdemone, an old Nancy variety, is again becoming popular because of its smoky old-rose color. Its purple throat blotch with pale yellow border is a heritage from the Lemoine type, while the large, widely opened flower is characteristic of the offspring of the Saunders Gladiolus. (5) Helen Franklin, a white variety of the ruffled type, developed by Kunderd.

with slender stalks and narrow, hooded, drooping, clear primrose yellow flowers. The hybrids are grossly misnamed "Prims," for they are anything but prim. On the contrary, they have the slender curved graceful stalks and dainty little hooded flowers of the Maid-of-the-Mist. One of their chief merits, their great fecundity, has been their undoing, and the world is now oversupplied with them, florists and showmen preferring the larger-flowered forms.

The yellow color of the wild parent is charmingly blended in the hybrids with the varied colors of the other parents, the result being sorts with many delicate new tints of salmon, buff, apricot, etc., in bewildering variety. The curious winged bird-like flowers are also favorites with many fanciers, though most of them droop so much as to hide their faces and spoil them for display. Some of the secondary hybrids, however, two generations removed from the parent species, combine many of the desirable traits of the primulinus—delicate coloring, slender grace, productiveness and vigor—with large, well-spaced flowers on tall spikes. We may look forward to great advances in the Gladiolus through the further development of this type during the next few years.

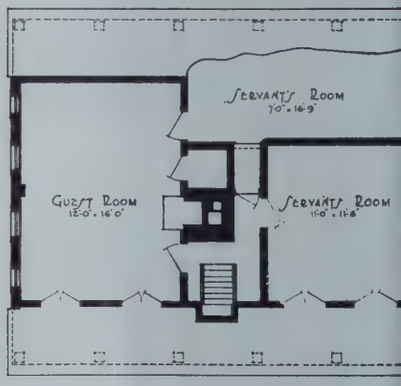
What of the Future?

THE steps in the advancement of the Gladiolus are in many respects similar to those in the rise of the races of men. Each step is marked first by the admixture of a strong primitive race with the older stock, bringing with it new hereditary characters—of stature, form, coloring and habit of growth. The interplay of these discordant new and old characters with one another seems to give rise oftentimes to unwonted "hybrid" vigor, developing offspring superior in sheer vitality to either parent stock. The first generation of the hybrids is apt to partake too much of the traits of the wild form to fit easily into civilized surroundings. Thus the hybrids of the Maid-of-the-Mist Gladiolus are too small and drooping to meet with general approval. As the undesirable characters are modified or eliminated in succeeding generations, there ensues a period of rapid progress of the race, each succeeding generation advancing far beyond any previous achievements. As the new strain becomes more completely blended with the old, a clear-cut and well defined type is evolved, the wild and undesirable traits having been bred out. Thus many of the modern sorts, such as Mrs. Dr. Norton, Mrs. Frank Pendleton, Mrs. F. C. Peters, Captain Boynton, Pembroke, Alice Tiplady, Crimson Glow, Pythia, Golden Measure, Joerg's White and Pink Wonder, have set a new standard of quality for "Glads"—to use the trade colloquialism. The new florists' type of Gladiolus is thus coming into its own, as did the Ghent strain during the '80's, but this new type has already far surpassed any of the older forms.

The influence of the primulinus strain of hybrids is already being felt, in adding grace and better spacing of the flowers to the already highly developed modern Gladiolus. These desirable traits of the primulinus type are well shown in Alice Tiplady, Sunnymede, and Myra; and we may look forward confidently to further advances in this direction in the near future. Meanwhile such well-known old sorts as Mrs. Francis King, Europa, War, America, Mrs. Frank Pendleton, and Peace set a high standard of merit by which to judge the newer offerings.

FURNISHINGS WHICH ARE IN TUNE

Wallpaper, rug, bedsteads, even the old-fashioned, tasseled picture-cord are all in keeping with the spirit of the house. The owners' bedroom (see plan on opposite page)



"Jane's Acre"

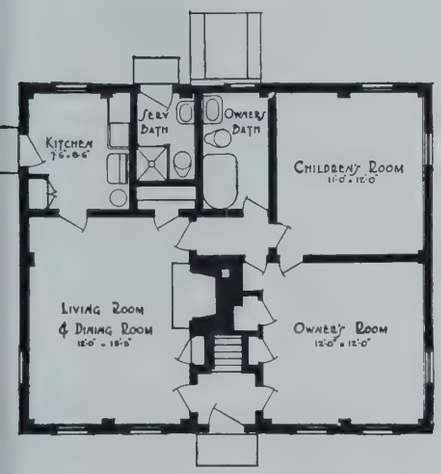
Designed by its architect-owner, Mr. E. P. Mellon

A Little Week-end Home at Bedford, N. Y.

Hinges, door-latches, and woodwork as well as furnishings faithfully reflect their period. Another view, showing fireplace and cupboard in this delightful living-dining room, appears on page 399

A "CLOSE UP" OF THE FRONT SHOWING THE CORNICE

Just a touch of restrained ornamentation needed to offset and accentuate the simple face of the whole is supplied by the cornice, laid like a narrow band of embroidery below the eaves



Set down in the friendliest of imaginable sites, an old apple orchard, this little white house has recaptured in extraordinary measure the spirit and charm of the Colonial. Inspired by the early architecture of the Cape Cod region and following with fidelity the simple detail of the original, this cottage, though planned primarily for week-end use, is equipped with all the things that make for comfortable present-day living—an electric range, two baths, abundant water supply, incinerator, and of course an adequate furnace in a small 12 x 12 ft. cellar at the center of the building—combining in almost Utopian fashion the advantages of practicality and the pleasures of remoteness

CUT FLOWERS FROM THE GARDEN

ELIZABETH LEONARD STRANG
Landscape Architect

Lists of the Very Best Cut Flowers, as well as Flowers with Fragrance, the Best Perennials, and so on may be found on pages 299, 300 of the January issue, in Mrs. Strang's introductory article on "Planning the Garden for Cut Flowers."—ED.

IF WE are to get out of the garden all that it is capable of giving us in the flowering season it is necessary to organize the work of raising the plants to be used. Some seeds must be sent to the greenhouse or frame for an early start, if one is to do all the plant raising at home. Otherwise an order for such things as need the early start must be placed with the florist who will grow them for you. It were well indeed to see to all the detail now to assure a supply, and not to depend on a possible pick up when planting time comes.

Not everybody who wants a cut flower garden has the facilities of a greenhouse at command, nor is that essential; but any one who pretends to any sort of efficient garden should possess a frame of two sash. This can be used as a hotbed or coldframe according to circumstances. But though a sash frame be wanted there is a window of the dwelling house that can be brought into service. It is not such easy sailing, for the seedlings in the window must be watched and tended slowly. The modern steam heated dwelling has its own terrors for the gardener, however, because that method of heating dries out all the atmospheric moisture. There is much to be said in favor of the old-fashioned hot air heater with its fresh air intake and moisture pan. Of course, there is more than one way to do it, but the subjoined lists have been worked out with a view to minimizing effort.

START IN FEBRUARY UNDER GLASS (in greenhouse or living room)

Stocks
Didiscus (Lace-flower)
Snapdragons
Salvia farinacea
Hunnemania
Heliotrope
Schizanthus
Salpiglossis
Pentstemon
Cuttings of Mayflower Verbena
Cosmos (pots later)
Ipomoea Heavenly Blue (pots)
Petunias (for very early)

START INDOORS IN MARCH OR EARLY APRIL

Asters
Nemesia (later for September bloom)
Dimorphotheca
Scabiosa
Petunias
Verbenas (April as they come quickly)
Godetias (later for fall bloom as they are soon over)
Centranthus
Marigolds

SOW IN COLD FRAMES OR SEED BEDS OUT OF DOORS (to transplant later)

Calendula
Zinnia
Annual Larkspur (small and slow)
Nicotiana (small and slow)
Marigolds and Tagetes (for late fall)
Godetia, for later bloom
Nemesia, for later bloom
Asters may be sown now though usually early

SOW WHERE THEY ARE TO BLOOM WHEN WEATHER PERMITS

Must not transplant

Poppy (March and late June)
Eschscholtzia
Annual Phlox
Candytuft (July 10 for fall)
Alyssum
Nasturtium
Sweet-peas (March)

May transplant, but do well without

Ageratum
Mignonette
Arctotis grandis
Cornflowers
Clarkia
Annual Lupine
Lavatera
Viscaria
Balsam
Dimorphotheca
Nemophila
Phacelia
Annual Gypsophila
Verbena (possible)
Portulaca

LATE BLOOM

As a guide for planting the garden for a supply of cut flowers late in the season these comparative "condition notes" will help:

Annuals still good Sept. 6

Mignonette
Ageratum
Annual Phlox
Sweet Alyssum
Annual Larkspur
Poppies, sown late June
Late Branching Asters
Gladiolus set out July 1
Snapdragons
Stocks (cut and come again)
Mayflower Verbenas
Nicotiana
Lavatera
Argemone
Swan River Daisy

Ragged Sept. 6

Sweet Sultan
Nemesia
Schizanthus
Arctotis
Lace-flower
Salvia farinacea
Godetia
Centranthus
Clarkia

Annuals Which Withstood Some Frost

Ageratum
Annual Phlox
Petunia
Argemone
Calendula
Alyssum
Cosmos
Mignonette
Snapdragon
Tagetes pumila
African Marigold
Poppies, sown late

Annuals Which Went at the First Touch of Frost

Zinnia
Nasturtium
Balsam
Heliotrope

ARRANGEMENT AND SELECTION OF THE CUT FLOWERS

Most of us can remember old time annual gardens and know how messy, how crude, how altogether horrid they can be; mixed Zinnias, and Annual Phlox, scarlet Salvia, magenta Petunias, and hot harsh yellows. On the other hand, how soft and attractive some of these lists sound,

Rose or Shell Pink	*Pale Blue*	*Sulphur Yellow*
Shirley Poppy	Nemophila	Annual Chrysanthemums
Godetia	Swan River Daisy	Argemone
Clarkia	Scabiosa Azure Fairy	Sweet Sultan
Annual Asters	Asters	Creamy Stocks
Pink Cornflowers	Lace Flower	Snapdragon
Snapdragon	Nemesia	Calendula Nankeen
Annual Larkspur	Stocks	Zinnia, primrose
Verbena	Nigella	Sweet Sultan
Scabiosa	Annual Lupine	
Zinnia, flesh	Annual Larkspur	

THE DEEPER HUES

Violet Purple and Buff	*Orange and Deep Blue*
Petunias	Calendulas
Buff annual Phlox	Dark Blue Larkspur
Heliotrope	Orange Zinnias
Canary Stocks	Cornflowers, deep blue
Calendula Nankeen	Orange Montbretia

Orange, Lavender and Deep Violet	*Crimson and Pink*
Dimorphotheca (Orange Daisy)	Gladiolus Mrs. Watt, deep red
	Cosmos, mixed
Arctotis grandis (Lavender Daisy)	Scabiosa, pink, crimson, maroon
Salvia farinacea	Zinnia, large flowered crimson
	Aster Giant Crimson Ray
Gladiolus Baron Hulot	Snapdragons, rose and rich magenta
Orange African Marigolds	Salpiglossis, crimson
Asters, Purple and Violet	Schizanthus, rose and amber
Heliotrope	Candytuft, carmine
Violet stocks	Clarkia, salmon and scarlet
Orange Celosia	Godetia, silky bright rose
Salpiglossis, violet and gold	Poppies
Statice sinuata hybrids	Annual Phlox, bright rose

Did space permit one could go on indefinitely compiling lists from different standards, but enough has been suggested to make one feel how far removed from the horrors of our grandmothers' times are the annuals of to-day, and how much better understood the art of combining flowers for both color and form. More and more their combination is studied and people care less for huge quantities of one kind.

These notes may prove stimulating to the imagination for there is literally no end to the combinations possible:

LITTLE THINGS FOR THE FLAT DISH WITH A FLOWER HOLDER

Primulas, Auriculas, mixed Polyanthus, Arabis, and pale Daffodils
Scillas alone, in a white and gold dish
Arabis and early pink Early Tulips
Blue Grape Hyacinth and Orange Geum
Violets, Forget-me-nots, Lily-of-the-Valley
Polemonium reptans and pink Late Tulips
Pink annual Gypsophila, pink Verbenas
Annual Phlox, Ageratum, Nemophila, Candytuft

TALL, UPSTANDING COMBINATIONS

Anchusa with Rembrandt Tulips
Lilacs with Late Tulips of cool rose (Centenaire)
Sulphur Iris, pale pink Peonies
Lavender Iris and orange Darwin Tulips
Larkspur and Lilies of white or gold, with Gypsophila
Miss Lingard Phlox with Larkspur
Coral red Phlox, Statice, and Eryngium
Dahlias laid flat on pewter plate, with annual Gypsophila
Mignonette, Annual Larkspur carmine, salmon-buff Dahlias
Sulphur Argemone, dull pink Nicotiana, Ageratum, Primulinus Gladiolus
Pink Gladiolus, blue Scabiosa, and Lace flower
Dull pink Zinnias; steely blue Eryngium; Gladiolus, pink or violet

As a background for early American furnishings there is nothing more fitting than a painted floor, especially if the boards be wide as in this room with its air of simplicity and repose

KEEPING THE FLOORS UP TO PAR

ELLEN D. WANGNER

Photographs by Mattie Edwards Hewitt and by Courtesy of The A. S. Boyle Company and S. C. Johnson & Son.

Making the Floor a Decorative Feature and a Background to Fit the Furnishings—Accentuating the Beatuy of the Natural Wood and the Grain Preserving

IN THE impression conveyed by every home, whether large or small, floors play a most important part. A room even of the best proportions, with costly furniture, well chosen draperies and color scheme, may yet be completely spoiled by its floor. The floor must be part of the whole decorative scheme just as are the walls and draperies. Where the house is new, it is a simple matter to bring out the texture and color, all the hidden beauty of the wood in the floor and, after all, that is what proper floor treatment amounts to. The grain of the wood, its high-lights and shades, its wealth of natural coloring may be made to convey a sense of richness to the interior of the whole house.

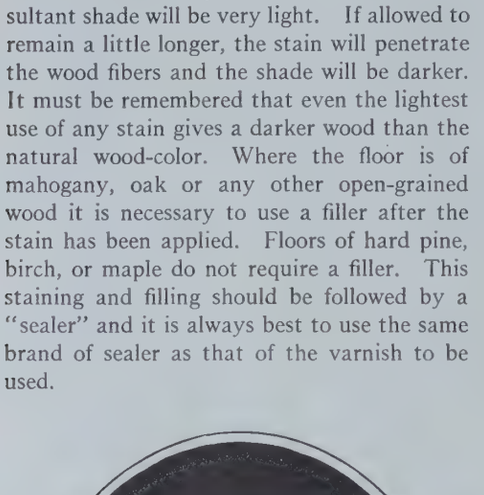
More and more are decorators and architects, and the average home maker as well, coming to appreciate and understand the beauty of the natural wood and are learning to handle it sympathetically. No longer is it covered up by paints and other obscuring media, but where color is desired this is achieved by merely using a stain and then waxing or varnishing it.

In studying the question of floors, the uses of the rooms must first be considered. The bathroom and bedrooms require, as a rule, a durable finish, and this and not the grain of the wood is the important factor. Such floors may even be painted in the development of some particular color scheme, or as a background for cottage furniture.

Throughout the lower part of the house, on the other hand, the floors must add to the richness of the rooms. And right here is a most important point to be remembered—the floor should not be made a dominant note in the room. The floor is for utility first of all and should serve as a background for the actual furniture. If must be like a frame to a picture—part of it but inconspicuous. To have a garish, almost yellow oak floor rise up and dominate a whole room as happens in so many, many houses, is to spoil that room in spite of its other well chosen features. A good rule to follow is Mother Nature's. She gives us the sky for a light ceiling, the darker hills for the walls and the brown earth with its shadows under our feet for the floor. This applied to the average room puts the floor into

its proper color relation to the rest of the room.

Where the natural grain is to be preserved, yet where color is desired, special transparent stains are made for floors. The color secured by using a stain depends entirely upon the amount used. If brushed on freely and wiped off at once with a piece of soft cloth the resultant shade will be very light. If allowed to remain a little longer, the stain will penetrate the wood fibers and the shade will be darker. It must be remembered that even the lightest use of any stain gives a darker wood than the natural wood-color. Where the floor is of mahogany, oak or any other open-grained wood it is necessary to use a filler after the stain has been applied. Floors of hard pine, birch, or maple do not require a filler. This staining and filling should be followed by a "sealer" and it is always best to use the same brand of sealer as that of the varnish to be used.



Once, waxing a floor meant much rubbing and tired muscles. A liquid wax that may be poured evenly on the floor has made this a simple task

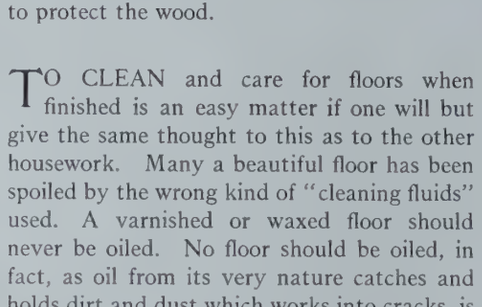
A weighted polisher that both spreads the wax and polishes, and that is as easily handled as a carpet sweeper. Like the sweeper it can go into corners and close to base-boards

In painting floors, be sure that the first coat is thoroughly dry before putting on the second. Allow 24 hours between coats, being sure to sandpaper and dust between each coat. Where you have an old painted floor to restore, it should be scrubbed thoroughly, then dried and sandpapered to a smooth finish. It will then take the fresh paint readily.

Where a varnished surface is desired, after the floor has been prepared by filling and staining, a coat of varnish (thinned by 10 per cent. of turpentine) should be applied. Allow this to dry for twelve hours, then sandpaper lightly and dust. Next apply two coats of varnish as bought in the can, allowing the first coat to dry before putting on the second. No varnished floor should be walked on for 48 hours after applying the last coat. Waxing a varnished floor gives a soft finish and also aids to protect the wood.

TO CLEAN and care for floors when finished is an easy matter if one will but give the same thought to this as to the other housework. Many a beautiful floor has been spoiled by the wrong kind of "cleaning fluids" used. A varnished or waxed floor should never be oiled. No floor should be oiled, in fact, as oil from its very nature catches and holds dirt and dust which works into cracks, is carried to the rugs and eventually gets into the wood itself.

A properly varnished floor need only be wiped with a clean damp cloth. Where well varnished the water cannot get into the wood. Such a floor makes for sanitation and ease in cleaning. When children's feet, nails in shoes or carelessly dragged furniture have marred a varnished floor, sandpaper lightly and put on a new coat.



It is a very easy matter also to care for painted floors where the work has been properly done. Wiping with a damp cloth and then rubbing with a dry one, will keep them in good condition. It is always advisable to give all painted floors a coating of some waterproof finish. There are many of these on the market to-day that preserve the floor and make care of it easy.

Waxing a floor is one of the simplest and most satisfactory methods of giving individuality and charm to a room. Once this meant hard labor, much rubbing and tired muscles. In this, as in other household matters, we have progressed and to-day there is not only a liquid wax that may be poured evenly on the floor but also a weighted floor polisher that both spreads the wax and polishes the floor. This utensil is as easily handled as a carpet sweeper, polishing squarely into corners and up to the baseboards.

TO LEND color to kitchens, bathrooms or breakfast nooks, linoleum is now supplied in well designed tile effects. To clean linoleum, it should be washed with lukewarm water and a good white soap. Soaps containing lye, or in fact any strong scouring soap will cause the surface to crumble. All good linoleums should be polished regularly each month with a good wax polish to prolong the life and brighten the colors. Another excellent plan is to varnish all linoleum as soon as laid. By doing this once a year the bright color will be retained and the surface kept from injury. Linoleum also comes in excellent hardwood effects like parquetry. Where the floor boards are in extremely poor condition, too bad to be waxed or varnished, and where a painted floor is not desirable, these may be covered by linoleum so designed as to resemble a high-grade parquetry floor. By waxing it, a most satisfying floor is secured.

Old floors may easily be made to look like new. (See "Possibilities of the Paint Pot," page 306, January, 1924). With just a little care, a little thought given to bringing out the simple natural beauty of the wood—the floors of any home may become one of its most decorative features.

Some Things to Remember When Buying or Making Curtains

A money saver in buying fabrics is to know your own amounts and not depend wholly upon the salesperson.

Fifty-inch drapery material cuts generally to better advantage.

Before buying sunfasts hold them up to the light because many, though very colorful, look dull, ugly and drab at the light.

A lining makes a curtain hang better, protects the fabric from the sun and looks better, with its neutral tint, from the outside than the colored curtain. It is in the long run actually an economy to buy a lining.

To make unlined French heading, so-called pinch pleated curtains, hang well, sew a piece of Holland shade cloth into the hem at the top.

To make curtains easier to slip on and off the rods, and to draw as shades, buy washable bone rings for this purpose. Attach to the back of the group of pinch pleats or sew closely together if there are no such groupings of fullness.

To remove valances easily, sew hooks onto the valances and ordinary curtain rings onto a narrow, cloth-covered valance board. The valances can then be readily hooked on or off.

To antique shiny galloon braid for trimming velour valances, brush over with vinegar.

CHARLOTTE LILIENTHAL.

Where the floor has narrow boards they may be stained and waxed to bring out their natural beauty—suggesting the charm of old New England homes

A varnished floor in neutral tones, with its surface waxed and polished throws into relief the rich beauty and coloring of Oriental rugs

DISCOVERIES of a "REAL DIRT-GARDENER"

Continuing the Walks and Talks at Breeze Hill

J. HORACE McFARLAND
Author of "The Rose in America" Editor of "The American Rose Annual"

Timely Comment and Conclusions of a Philosophical Gardener for Whom Satisfactions Far Outweigh Disappointments in the Fascinating Game of Making Things Grow

THE real dirt-gardener, who has hand contact with plants, and who cannot depute to his help the closer attentions, has many disappointments, but he has as many, or probably more, peculiar satisfactions. Among these pleasures is, for me at least, the perfection of a plant I have watched and coddled and worried over. This reflection was excited by a Peony. I should say right here that I am not a Peony "fan," have none of the sorts whose particular merit seems to be their costliness, and consider this solid garden reliance only for its intrinsic beauty and adaptability.

The Peony I am now particularly enjoying is Albiflora The Bride, a great white single flower that looks as if it had started out to be a Waterlily and had thought better of it. The plant that is paying me richly to-day for its place in the garden has a history. Several years ago I visited Farr's Peony heaven in company with three other garden men, one of them professor of landscape architecture in an Eastern college, but a "real feller" notwithstanding. The four of us "looked out" six Peonies that we liked out of the six acres of plants that we saw. This Albiflora The Bride was one of the six—the only one I could afford to own. It came along that fall, and it has been a joy each summer since. Twenty great blooms open on occasion, so disposed as to make the plant chastely lovely. I have it placed where it will count in the garden picture.

To be sure, these garden joys are fleeting, or rather changing, and I presume would not appeal to the curious near-gardeners who make continuous bloom the criterion of merit. They miss the movable feast of beauty in the right sort of garden, in which every day—indeed, every morning and every evening at least—brings its own pleasures. These pleasures are evanescent for the eye, but perennial for the memory; I will be enjoying that Albiflora Peony a whole year, until it renews the memory for me another season.

A RAINY DAY IN THE GARDEN

ANY true gardener wants to see his plant pets as they receive the life-giving rain. To me there has always been a peculiar joy in exposure to the rain, and I find, curiously enough, my daughter to possess the same inclination. When that exposure can be in the garden there is double advantage. One sees how everything is brightened by the kindly touch of falling water, and then how Nature's provision takes care, for the most part, that water injury shall be minimized. Some flowers close up and shut it out; some lean over and pour it out.

The day I write these words I have been walking about the garden after a heavy rain which has left its millions of crystal drops on the Roses in their first flush of the summer's bloom. The rain came without wind, and the drops therefore remain just as intensified dew rather than as the result of a storm. Under such conditions I am at once attracted to Sargent, a little known hybrid Rose originated by Jackson Dawson in 1912, and including, as he describes it, a combination of Wichuraiana, Crimson Rambler, and Baroness Rothschild. To me the best short description would be to call it a "glorified apple blossom," and when I can get it with the dewdrops of early morning or after the sort of rain I have been describing, I am permitted to enjoy one of the finest garden satisfactions.

After all, a garden ought to be a place to live in pretty much all of the time. I had a friend who after introduction to the exquisitely fine grass walks produced by a curious Connecticut Yankee named Olcott, always managed to get on to those walks with bare feet so as to feel the velvety softness and texture of the grass. If there was a rain it was so much the better! (By the way, the Olcott place was a true "grass garden," in which was grown scores of varieties of grass in fascinating purity of texture, color and quality.)

Many others enjoy the garden in a rain. Visitors from a near-by city who were with me one rainy day on sordid business happened to be all garden cranks, and they joyously shuffled about Breeze Hill, seeming to get as much pleasure as I did out of it all.

THE NEWER SHRUBS

ALTHOUGH the hard-hearted and unreasonable exclusions of the Federal Horticultural Board combined with the reluctance of American nurserymen to adventure much in new things make it probably wrong to promote a desire, I cannot refrain from mentioning some of the less well-known shrubs that ought to be in our gardens.

Each spring the contrast is glaring between the common nursery form of Forsythia viridissima and its far better hybrid F. intermedia, with its yet better varieties, spectabilis and primulinus. F. intermedia is superb, but F. intermedia spectabilis is more so, being more vigorous, having larger flowers and of a distinctly deeper yellow. The primulinus form is not appreciably earlier, but it is agreeably lighter in color, and therefore worth while.

Then the Deutzias that ought to be easily available are really lovely. John Dunbar described them in THE GARDEN MAGAZINE for May, 1917, but I do not see any of them in catalogues. Deutzia discolor, with its flowers a full inch across in pearly whiteness, and two of the pink sorts—D. carnea for one, and D. elegantissima according to the label (I suspect a mix!)—are daintily different, and fine. The Boule de Neige form of D. Lemoinei compacta is literally all balls of snow.

Again I advert to the exquisite Chinese Lilac, Syringa pubescens, which in 1924 had a blooming that was most effective. Its small lavender flowers in long panicles are distinct, fragrant, and lovely; but the habit of the plant in blooming all over, not merely at the top, and so profusely that the foliage is hardly visible, make it a shrub to be desired. Prof. Sargent's bulletins speak of it as hard to grow, but my pleasant propagating neighbor, Mr. Haehnlen, has had no trouble in rooting it from hardwood cuttings. I have seen it bloom in a four-inch pot.

Another of these Wilsonian Lilacs is Syringa reflexa, which last year bloomed late and bountifully, but not with the drooping panicles that give it a specific name. The color is light red—not remotely like the ordinary lilac red, but actual, definite red, shading toward the tips of the panicles as the flowers open to a much lighter hue. It is by far the most distinct Lilac I have seen, and very beautiful in itself. I cannot but hope that a hybridizer of Lemoine skill will get busy with it, for obvious advantage.

Again I enjoy greatly the varied fragrances of the Philadelphuses, as well as their varied blooms. The Chinese introductions give us rare scents. Philadelphus subcanus (sent out first as P. Wilsoni) is of hyacinth odor, while P. sericanthus Rehderianus is almost identical in its nose effect with the old favorite "Vanilla" or Valeriana officinalis. The most pleasant of all is P. purpurascens, which has dull purple calices, and a definite and delightful odor of Sweet-peas. These species are not so conspicuous in bloom as the worthy French hybrids like Virginal, Conquête, and others; but they are entirely worth while, at least in my garden.

FURNISHING FOR COMFORT

CHARLOTTE LILIENTHAL

Drawings by Fannie E. Lockwood

How to Pick Good Upholstery Indispensable Pieces for Living Room, Library, and Boudoir

BUYING upholstered furniture, is like buying a pig in a poke: you have to judge by the outside. The buying, therefore, is sometimes fraught with hazard, but there are ways of judging the inside from the outside, and the universal desire for comfort lures one inevitably into the adventure. In the first place, buying custom-made over-stuffed furniture (that is, with no wood but the legs showing) from a decorator-manufacturer or an upholsterer, is likely to be safe as the criterion for workmanship is quality rather than speed as in factory-made furniture.

The life of upholstered, unlike that of other furniture, is in its interior. One should not then be carried away with its covering and its cheapness in price in comparison with other upholstered pieces similar to it. The stuffing may be anything, moss or old rags! It is poor tying, insufficient and cheap webbing that allow springs to sag and holes to come. In cheap furniture the tying will not be sufficient and the webbing will be the too narrow kind which rots. One may kneel down to feel the webbing. The wide four-inch is the best. Sitting and rising tests the springs. Are they soft but not too soft? Do they allow one to arise easily? If not, it may be also because the frame is too low. The best height for a davenport is about eighteen inches.

It is a mistake to buy the commercial box-spring cushions. Down ones, though more expensive, are soft and luxurious and fluff up when placed in the air. However, some people, fat or long-legged, will find the down cushion a snare and a delusion. These people sink in so far that their knees come up, and a derrick seems necessary to lift them out. A little extra height of the davenport or hair

WHERE UPHOLSTERY LENDS AN AIR OF SUBSTANTIAL COMFORT

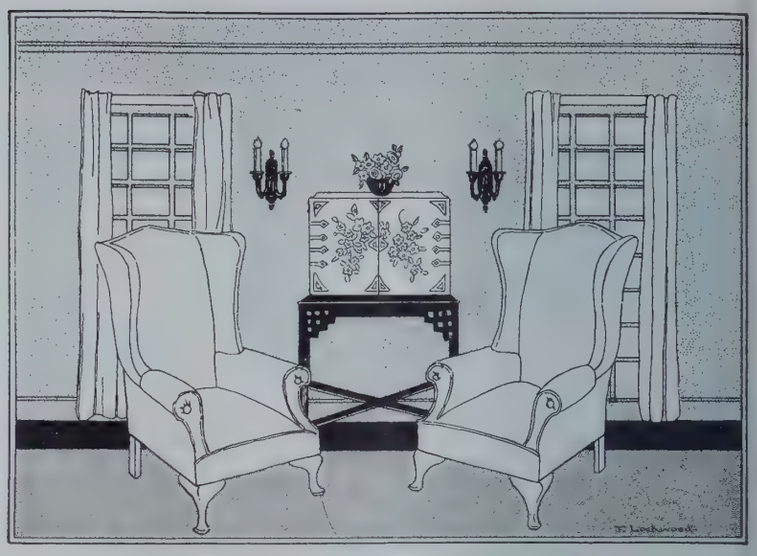
This living room combines a pleasant lightness with an air of genuine ease; well chosen chairs and carefully placed lamps contribute to the effect. *(Decorated by the Arden Studios)*

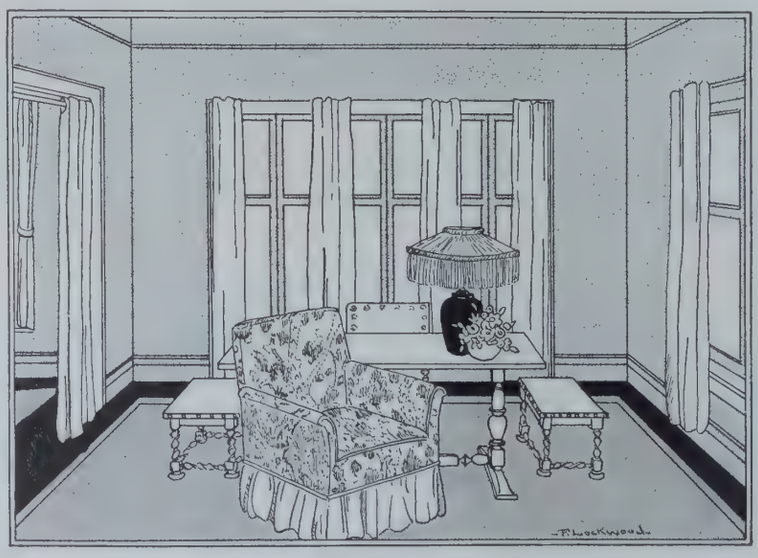
cushions will save this embarrassment. A rather hard pillow, placed at the back, will shorten the depth and make it easier to rise.

The decorator-manufacturer keeps the down in place in stitched sections in the inner cushions. The factory manufacturer does not, and the filling does not "stay put." The distasteful tufting, still seen in the more commercial pieces, is a sure indication of the old method of upholstering, a way of keeping the filling in place by tying. How unsuccessful this is one knows from experience with home (and some store) quilted comforts.

The reason for the tying down of the back of a davenport into sections is a practical one, to keep the filling of this large area in place. However, when there are three loose cushions, tying the back also into three equal divisions is rather monotonous. The plain back, although slightly wrinkled at times, if of sateen, may be smoothed out. Its interest and beauty balance evenly with the uninteresting but more practical tied back.

Do not select the bulbous, with the padding all on the outside and too highly padded inside to be comfortable. See that the design is well spaced.

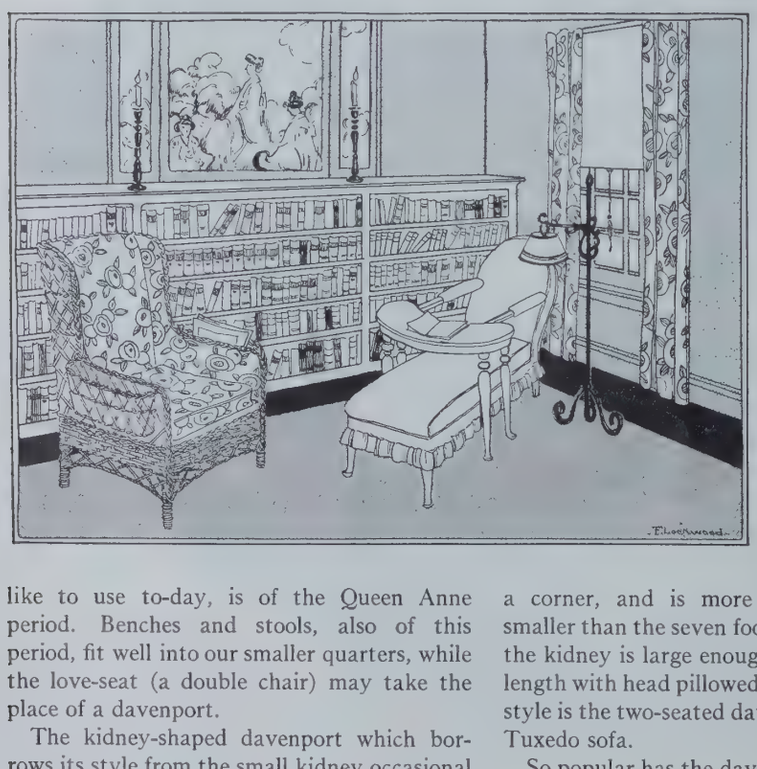




The Queen Anne cozy, draft, or grandfather chairs make a comfortable grouping above; and the sort of chair that would please a man is shown at left, it has a comfortably sloping back and arms of good height for rest and reading

DIFFERENT STYLES OF DAVENPORT AND SOFA

THE davenport is a modern piece, but the rather usual ball feet harmonize it with Colonial or William-and-Mary furniture. The davenport-bed comes in all periods. Since so very much emphasis was put upon upholstery in Queen Anne's day when fixed upholstery first came extensively into use, one will find many pieces of furniture in that period from which to select. The easy, cozy, or draft chair, which we call the grandfather or wing, and like to use to-day, is of the Queen Anne period. Benches and stools, also of this period, fit well into our smaller quarters, while the love-seat (a double chair) may take the place of a davenport.



The chaise longue is one of the indispensable pieces for bedroom or boudoir, particularly when equipped as here with reading lamp and table

The kidney-shaped davenport which borrows its style from the small kidney occasional table is a new idea to many. Its advantages are that it is a smaller piece, may be pulled out into a room away from the wall or pushed into a corner, and is more unusual. Although smaller than the seven foot over-all davenport, the kidney is large enough for lounging at full length with head pillowed. Another less usual style is the two-seated davenport, the so-called Tuxedo sofa.

So popular has the davenport become that a sofa now has the advantage of being less usual. By sofa is meant not a covered couch but a three-seat, flat, upholstered piece with back and arms but unpillowed, and without loose cushions. It has the same advantages of seating capacity and adding variety to an assemblage of mere chairs, but it cannot be used as a bed nor is it as comfortable a lounging piece. On the other hand, its flat upholstering gives it the effect of being a smaller piece, much like a fat man subdued by a blue suit.

COMFORTABLE CHAIRS FOR "MASTER" AND "MISTRESS"

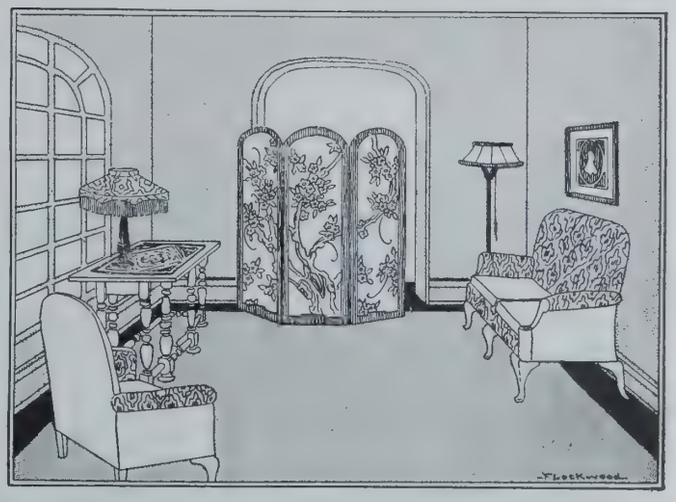
THE master of the house, by the way, is sure to want an over-stuffed chair, and although some of the wing type or the deep, low, big lounging chairs suggestive of the English morning room are likely to appeal to him, it is wise when making a selection to take him along. He, unlike the woman, will not look at the covering—or most of the "he's" won't! The right slope to the back, the proper height for his head to rest, the convenience of a leg rest will most interest him.

For her very own self the woman will want a slipper chair in her bedroom or dressing room, a chaise longue for her nap, and an upholstered chair in which to relax in the living room. The slipper chair will need to be low seated so that she can bend easily to the floor, and the back will be low also so as not to muss

A variety of easy chairs give this reception hall at the home of Mrs Ashley Tobias at Columbia, South Carolina, a particularly welcoming aspect. Arden Studios, decorators

her hair when just dressed. It will not be the comfortable lounging piece of the living room, but it may afford her more scope for dainty, alluring coverings of glazed chintz, armure, or taffeta. Her living room piece need not be all upholstered, especially if, beside her husband's over-stuffed, she has selected a davenport.

There are dainty, feminine easy chairs with cane backs and loose down cushions, or a so-called Martha Washington chair of Sheraton feeling with flat upholstered back and seat



The Queen Anne loveseat (shown above) is less frequently seen than the davenport but it is a comfortable and often a decorative piece of furniture where wall spaces are such as to allow for the high back. For small quarters a sofa and sleek upholstered chair (below) are better than the large over-stuffed pieces

of cretonne and wooden arms and stretchers showing, a piece with a sloping back; or smaller chairs which, although over-stuffed, because small, look feminine and do not have high, straight backs to muss one's hair, or others that have higher rounded backs upon which one can bend back one's head but which reach only to the shoulders.

For the afternoon nap, or a few minutes of privacy stretched out with a book, the chaise longue is the acme of comfort, and may be had in one piece or two or three. It may be straight or curved under the knee, of willow, or of wood but, whatever the type, it should always be upholstered.

Troutbeck

Home of

Mr. and Mrs. Spingarn

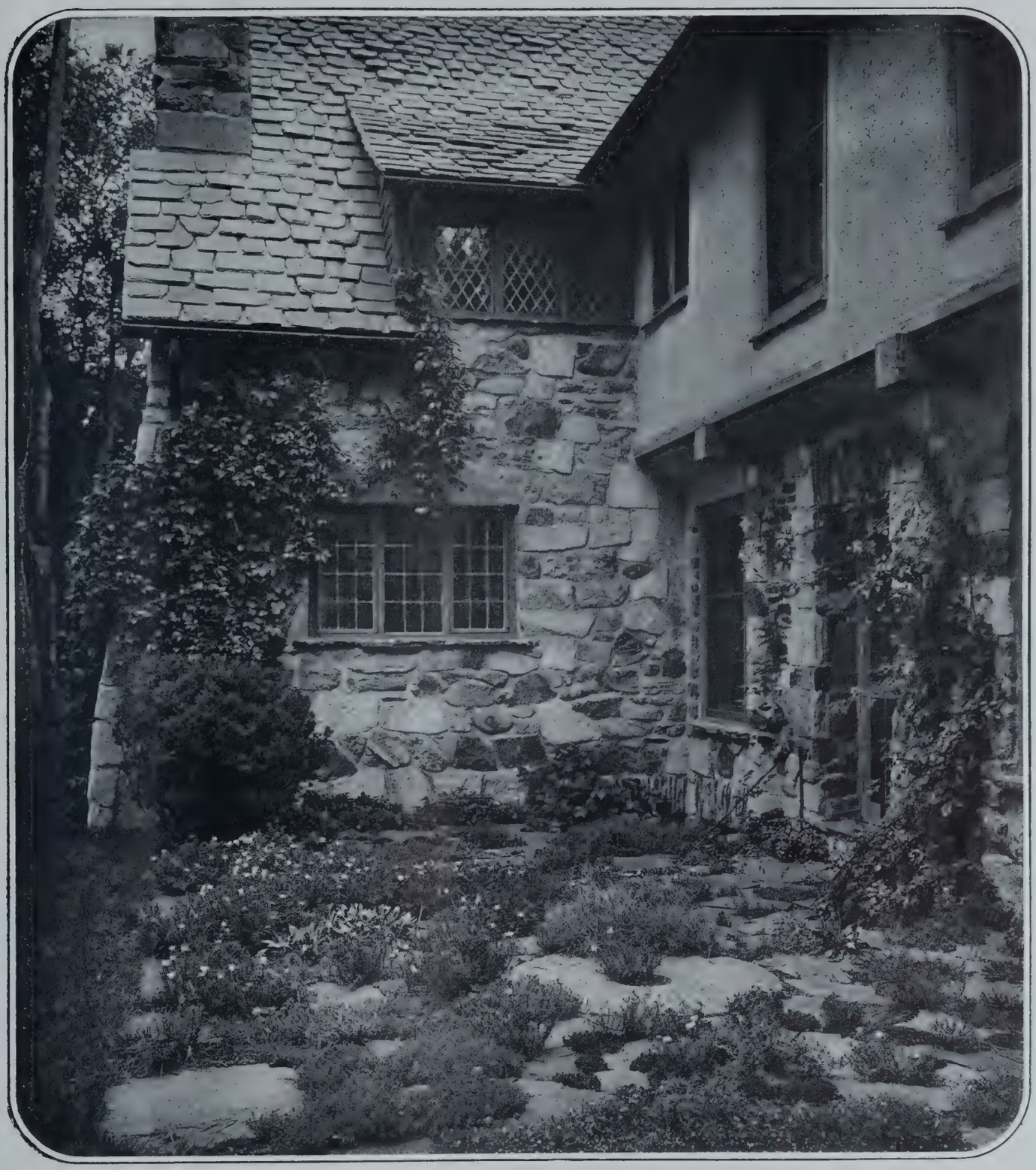
Dutchess County, N. Y.

Henry E. Woodsend, Architect

Photographs by Mattie Edwards Hewitt

It was of this storied homestead that John Burroughs wrote in 1910: "I have known Troutbeck since 1862. It is the most beautiful place I have ever seen." The original house was built in 1765 and was the home of the poet, Myron Benton, friend of John Burroughs and recipient of the last letter written by Thoreau. Fortunately, after Mr. Benton's death in 1901, the place passed into understanding hands, for Mr. J. E. Spingarn, its present owner, is also a poet and cherisher of the beautiful. Fire destroyed the old homestead in 1917 during Major Spingarn's absence in the Great War and was replaced two years later by a new dwelling (shown in the accompanying pictures). Magnificent trees margin the lawn, and beyond the big Buttonwoods (seen in the circle at left) runs the delightful little Dunham Brook. Indeed, the subdued music of water is all about Troutbeck, and its bubbling spring has found permanency on the pages of John Burroughs's "Pepacton"

So partial a view can give but a slight idea of the sweep and the play of light and shade of this lawn. Only three of the noble row of Buttonwoods are shown and several magnificent Elms do not appear; nevertheless it is easy to understand Sinclair Lewis's exclamation on a visit to Mr. Spingarn; "It's not a lawn—it's a grass grown cathedral!"



THE "ALPINE TERRACE" AT TROUTBECK

His fondness for rock plants has led Mr. Spingarn to place them close by the house where they may be often seen and enjoyed. Planted are Saxifraga, Sempervivum, Sedum, Veronica, Daphne, Aubretia, Arabis, Phlox, Dianthus, Alyssum, Gypsophila, Thymus, Helianthemum, Primula, and many others, including a few of the miniature spring bulbs and some rare species contributed by Mr. Clarence Lown of Poughkeepsie, whose own collection of rock plants is admittedly the finest in this country (see G. M. February, 1922, page 319, "The Lessons of a Life-time with Mountain Plants" by Clarence Lown). An old millstone makes an interesting focal point at the center of the terrace. A few self-sown annuals carry on the bloom throughout the summer. This "Alpine Terrace" is not intended to be a "rock garden," but merely a terrace beautified by rock plants

SAVE THE WHITE PINES!

LEONARD BARRON

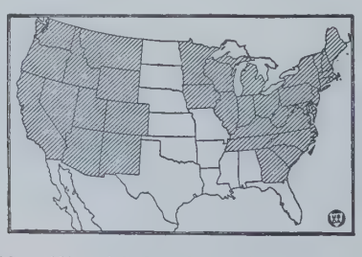
The Case of the White Pine *vs.* Black Currant—No Known Remedy for the Blister Rust which Travels 150 Miles from Pine to Currant—Currants Must Go from Many Sections

Photographs by courtesy of U. S. Department of Agriculture

AS AGAINST the Black Currant which is a fruit of negligible interest, even to those who like it most, the retention of that large group of evergreens included in the Five-needle or White Pines there can be little practical argument. The white pine blister rust has already been largely distributed both in the East and in the West and is reaching into other regions.

Owing to the onslaught of the disease the New York State College of Forestry says the "native White Pine is doomed as a commercial tree." That may be an alarmist cry, but weighed in the balance by the gardener the Five-needle Pine group is vastly more important than Currants and Gooseberries. Our White Pine is not only one of the most useful trees but it is also one of the most dignified and in many respects the most adaptable of all the large evergreens in the region where it belongs. In maintaining its existence surely the landscape architect, the nurseryman, and the gardener have much more at stake than in the growing of Black Currants.

The white pine blister rust is one of those diseases that needs an alternate host, that is to say, it cannot pass from one Pine to another Pine: the journey must be made by way of some Currant or Gooseberry. Destroy the intermediate channel and the disease is checked. The European Black Currant is by far the most susceptible member of the Gooseberry-Currant family and its removal from all gardens would not work serious inconvenience. Gooseberries and Red Currants which are lesser sinners may be grown in certain sections where the keeping of the evergreen trees is not a factor. As garden crops they are really only worth while in the northeastern quadrant of the United States. Elsewhere their abandonment can be lightly regarded. However, there is the central tier of states running from North Dakota down to the Gulf that may still harbor Black Currant according to the maps issued by the United States Department of Agriculture, but against that is the fact that there is not much temptation to grow them in that strip as they are not particularly adapted. East and west of that column of states the Currant family must give way to Pines, speaking generally.



No public-spirited gardener will plant Black Currants in any part of the shaded territory

All species of the White Pine group are likely to be attacked by the blister rust which can be recognized from these photographs. The old canker shown on the left is beyond salvation, and the branch is dead. A younger condition is seen on the growing shoot. It has orange pustules in May and June. Cut off and burn all diseased branches to save the tree. The currant leaf in circle shows its under side literally peppered with the fungus and ready to yield millions of spores to the ways of the wind

White Currants, Red Currants, and Gooseberries which are grown for garden purposes may still be kept so long as there is no White Pine plantation near by. The Department of Agriculture recognizes the place for these garden crops and authorizes the free movement of such plants if thoroughly defoliated and dipped in either bordeaux or lime-sulphur.

It is the Currant family leaf that carries the disease. The blister rust is carried from the Currant to the White Pine by the wind and the distance of a thousand feet separation appears to be a guarantee of safety if Black Currants are absent, but the latter produces three or four times as many spores and in the northwest have become affected by the rust at distances of more than one hundred and fifty miles from the nearest affected Pines. The spores spread in the summer-time from late June onwards. In the early stages of growth the Currant or Gooseberry rust does not infect White Pines but it does infect other Currants or Gooseberries. To protect the White Pine group from the rust it is only necessary to destroy the Currants and Gooseberries within the distances already mentioned. Shall we not do this?

Following is the list of 5-needle Pines that are known to have been attacked by the white-pine blister rust (of course their varieties should be included).

SPECIES	POPULAR NAME
Pinus koraiensis	Korean
Pinus cembra	Stone
Pinus albicaulis	Whitebark pine
Pinus flexilis	Limber
Pinus ayacahuite	Mexican White
Pinus Lambertiana	Sugar
Pinus parviflora	Japanese White
Pinus peuce	Macedonian
Pinus excelsa	Bhotan
Pinus monticola	Western White
Pinus strobus	White
Pinus Balfouriana	Foxtail
Pinus aristata	Bristle-cone

VIOLETS FOR YOUR GARDEN

LOUISE BEEBE WILDER

Author of "Adventures in My Garden and Rock Garden," "My Garden," and Other Books

Some Little, Long Hidden, Wildings Now Disclosing Their Light in Our Rock Gardens and Unfolding Low Sheets of Color in the Shade Where Plants so Often Refuse to Settle

Photographs by Henry Troth and Arthur G. Eldredge

TO SET out to know Violets—not the Violet of the hothouse and frame, nor yet the florist's Pansy, or the Tufted Viola so much used in English gardens, but the little wild species that bedeck mountain and plain, wood and meadow, in various parts of the world—is to prepare for oneself a delightful and unexpectedly varied experience. Among them are lovely alpines as tractable as Buttercups that make sheets of color along the border edges or in the rock garden; shy natives that take some handling; subjects for the rock garden in sun or shade, for shady banks, the open border, or damp woodsy places. All, with few exceptions, of the easiest culture, easily raised from seed, and very generally hardy.

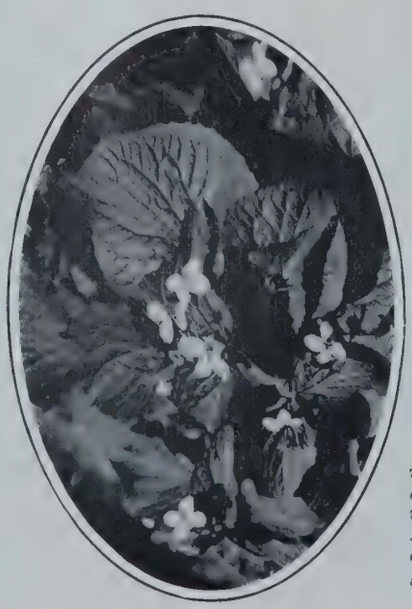
The alpine varieties are not long-lived, as a rule, but keep themselves going by means of self-sowing, and will bloom the first year from seed if sown early. In gathering seed from any Violet it should be secured before it is mature, for the little pods fly open very suddenly scattering the seed so that it is lost to us.

The species mentioned here are but a few of the many desirable and lovely sorts available.

VIOLA BLANDA is a delightful little native found throughout the East from Maine to Georgia. It has faintly scented white blossoms indistinctly blue-veined held well above the leaves. With me (near New York City) it blooms early in April and makes the prettiest possible ground-cover for patches of bright blue Scilla sibirica. It delights in partially shaded corners where the soil is fairly rich, and it also thrives in full sunshine where there is plenty of moisture. Its habit of growth is neat, but it has an unobtrusive way of spreading into large colonies.

V. CALCARATA, one of the loveliest of the alpine species, has large, pale lavender flowers, a good deal like the Horned Violet (V. cornuta), but with more rounded petals. It is a most useful sort for edging borders, for it is most floriferous, or for making spreads of soft color in the rock garden. Even more desirable than the type are some of its offspring, one in particular, having here proved itself of the greatest merit. This is V. florairensis, of which Mr. Correvon, its sponsor, says: "The flowers of the hybrid are large, purple, with a whitish eye. It is slightly sweet-scented. The plant keeps up a succession of bloom from January first until the end of December." It will not bloom quite round the year in the northern parts of our country, but its lovely blossoms may be counted upon for at least nine months of the year. Easily raised from seed.

V. CANADENSIS is a native species found in rocky woods in many parts of the East and, less frequently, as far west as the Rocky Mountains. It is a modest appearing plant, which, though a foot or more tall, with leafy stems, needs to be seen close at hand to be appreciated. The small blossoms, pale violet on the outsides of the petals and gray-white within, spring from the forking leaf-stalks and are of a most dainty beauty. Fragrance has frequently been ascribed to this Violet, but



The Horned Violet (Viola cornuta, shown above) with its multiplicity of alert little blossoms, that look almost ready to take wing and fly away, is the most valuable of the alpine species for garden purposes. A useful native species is the Canadian Violet (Viola canadensis, at left), fine for the north side of the rock garden or for naturalizing in wooded rocky places. *(Descriptions of color, habit, etc., on page following)*

I have never been able to detect it. It is a plant for the north side of the rock garden or for naturalizing in rocky, wooded places. It is quite hardy.

V. CORNUTA, the Horned Violet, is for garden purposes, the most valuable of the alpine species. It is a native of the Pyrenees. Its growth is low and tufted and the very long, lavender flowers, awl-shaped as to the petals, have an airy "winged" appearance that is very distinctive and charming. Many beautiful hybrids have been derived from V. cornuta which flower with almost unparalleled generosity, the foliage being quite hidden from March until November, if seeding be prevented, by the multiplicity of "flying" blossoms, and I have frequently gathered them in sheltered corners in December. The variety Papilio is to my thinking the best of these hybrids. The upper part of the flower is bright lavender, the lower creamy white, and each petal is traced with royal purple. It makes a most lovely border edge in sun or half shade combined with the orange-yellow Cheiranthus Allioni. Haselmere is also a fine variety; its flowers are lilac-pink. The variety alba is full of sprightly charm, but has been, with me, much less persistent than the others.

V. GRACILIS is a small, neat-habited species from the Greek Mountains with creeping roots and close-growing leaves. It is a rock garden plant of the first order, free-flowering and hardy and bearing bright purple velvet blossoms for many weeks of the spring and early summer. It likes a situation in sun or half shade where the soil is light and fairly rich. Easily raised from seed. Good hybrids are Lord Nelson and Purple Robe.

V. NIGRA, known also as Bowles' Black Pansy, is a most engaging little Johnny-jump-up which, though it grows here cheek by jowl to other parti-colored Johnnies, always comes true from seed and raises up every year a great company of spry babies with almost jet-black faces. It does not start to bloom quite as early in the spring as the other Johnny-jump-ups, but it goes with them in the autumn almost to the snows. A very smart effect is created when this little black Pansy is planted about spreading patches of the white creeping Phlox Nelsoni. V. nigra is a biennial but self-sows freely.

V. PEDATA, the Bird's Foot Violet, is the gem of the American species, but though common, and even rampageous, in some localities, is so shy and wild a creature that to bring it to accept captivity requires a very sympathetic estimate of its nature and requirements. It is found in various parts of the East and Middle West in sandy fields or dry woods. Owing to its low tufted growth and slow increase, the rock garden seems the best place for it, though little plantations might be attempted in dry, light woodland where it would not be overpowered by stronger plants. The flowers of the type are very large, of good substance, and pure light lavender. The rarer and much more difficult variety bicolor is a most exquisite combination of rich purple and light lavender. There is a rare white variety. The foliage is slightly hoary and claw-like.

V. ROTHOMAGENSIS, the Rouen Violet, native of Belgium and France, is a very nice little plant with creeping stems and bright lavender flowers of the type of V. cornuta traced with black. It blooms all the spring and summer and is easily raised from seed.

V. SEPTEMTRIONALIS. This native Violet, found along the Canadian border and south to Connecticut, once traveled to England and secured an Award of Merit from the R. H. S., but small notice is vouchsafed it on this side the water. It is a fine plant for shady borders or wooded places in rich soil that is not too dry. Its large white blossoms, clearly penciled with bright blue, are produced in the greatest profusion and carried well above the foliage. It is a delightful plant for cutting and most valuable in the garden. It may be increased by breaking off the fleshy rhizomes and planting them in moist, sandy soil. According to the "Standard Cyclopedia of American Horticulture" the type plant has purple flowers, but I have never found or seen mentioned any but the white-flowered variety.

MAKING A COLDFRAME

HENRY WANGNER

Working Drawings and Mill Bill of Material

EVERY garden regardless of size needs a coldframe, and so easily and inexpensively may this useful accessory be made that every garden should have one; and, where possible, a hotbed as well. Hotbeds are only coldframes grown deeper, as the accompanying drawing proves, and may be made like a box down in the cellar or work shop and then sunk into an excavation in the garden. So essential are such frames to the owner of even the smallest plot of ground if he would work it efficiently, so much do they aid in putting the garden a lap or two ahead of spring, that they may be deemed one of the best of all "tools" for the garden. It is better, perhaps, to purchase the sash which are made of standard size, 3 x 6 ft., and can be had glazed or unglazed. Some people greatly prefer the double-glazed sash, for the extra glass does much in holding the sun's heat for a longer time. Also for those who would have a smaller frame there is a half size sash offered by the dealers.

When making the frame use cypress or yellow pine lumber and tenpenny wire nails, galvanized. Where a 2-sash coldframe is desired, it is advisable to have lumber about 1¼ inches thick for added strength, although 1 inch lumber *will* do.

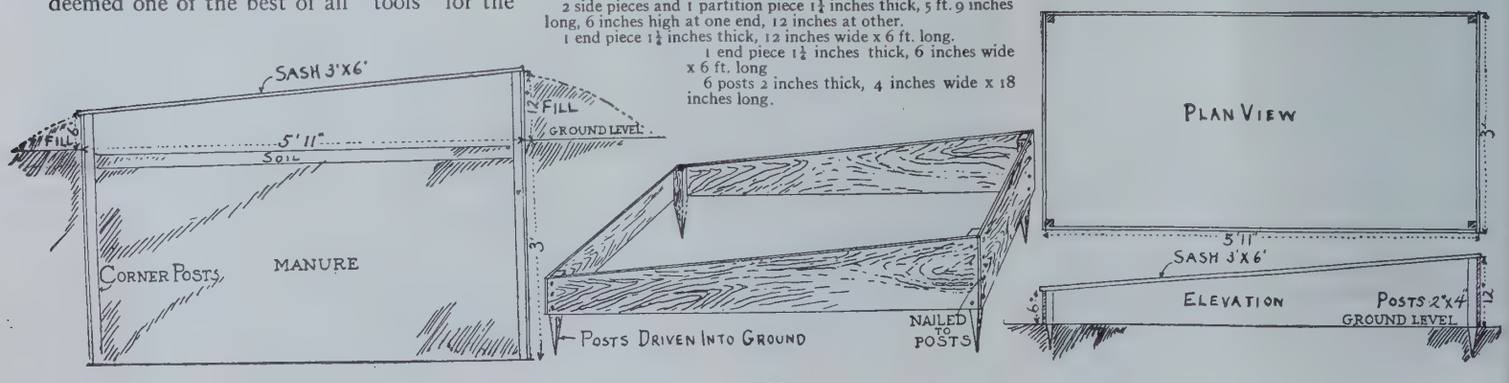
The bill of material to make a standard frame as shown in the accompanying sketches is:

ONE SASH FRAME

2 side pieces 1 inch thick cut at mill as shown, each 5 ft. 9 inches long.
2 side pieces 6 inches high at one end 12 inches high at other.
1 end piece 1 inch thick, 12 inches wide and 3 ft. long.
1 end piece 1 inch thick, 6 inches wide and 3 ft. long.
4 posts 2 inches thick, 4 inches wide x 18 inches long, sharpened at one end for easy driving into the ground.
To make this frame drive two additional posts for the partition, setting the partition centering on a line 3 feet from sides.

FOR A TWO SASH FRAME

2 side pieces and 1 partition piece 1¼ inches thick, 5 ft. 9 inches long, 6 inches high at one end, 12 inches at other.
1 end piece 1¼ inches thick, 12 inches wide x 6 ft. long.
1 end piece 1¼ inches thick, 6 inches wide x 6 ft. long
6 posts 2 inches thick, 4 inches wide x 18 inches long.



In the Climatically Favored Gardens of the Northwest The Old-fashioned Larkspur in its Modern Improvements is Outclassing Many Established Familiars

A New Dominance of the Delphinium

MRS. JOHN CARROLL PERKINS

IN SEATTLE and the adjoining neighborhood, on Bainbridge and Vashon Islands, in Tacoma and Bellingham and the outlying country, innumerable gardens are springing into being with the increasing development of the cultural side of life. Scarcely a half century ago civilization had not advanced beyond the threshold of this far Western country, which to-day is spreading its gardens where once the primeval forests held undisputed sway; and whether or not the genial climate of Puget Sound can boast peculiar advantages over other parts of the country, gardeners there are not beset with many of the trials and discouragements attendant upon rigorous winters, scorching heat, and sudden and devitalizing changes of temperature; digging and planting can be done every month of the year; and the herbaceous border has color and verdure practically all winter. The late Asters and Chrysanthemums and Anemone japonica are quickly succeeded by Christmas-roses and winter-blooming shrubs that lend color to our gardens, and the procession of so-called "spring" flowers is early on the march.

THE finer gardens of the Northwest have sprung into being within a comparatively few years, and it has been interesting to observe the rapid increase in popularity of particular plants and flowers and very notably the Larkspur. It is not too much to claim for the Delphinium a world-wide popularity at the present time and in the Pacific Northwest they have fairly leapt into a dominant place. What charm is in their stately grace, their well-furnished spikes of bloom with tones of matchless hue from pale blue in the Belladonna section to varying shades of pinky mauve and lavender and deep blue and purple in the Hybridum forms! Plant lovers and landscape gardeners alike revel in the prodigal use of Delphiniums in our gardens. They enhance and harmonize the herbaceous border as almost no other perennial does. With a little attention to their special needs their period of bloom may be made to extend over many weeks. When their first flowers have faded, if the stalks are cut down, new bloom will be the reward in late summer, almost equal to that of June and July. Intermingled with auratum Lilies, a background of Buddleia and clumps of pale pink Primulinus-hybrid Gladiolus a delightful grouping may be achieved when summer is waning and the spirit of autumn is brooding over the garden.

In a rarely beautiful garden, that of Mrs. Chester Thorne at American Lake, Tacoma, one sees the fine effect of Delphinium as a border plant. Amid wide spaces of floral beauty with backgrounds of shrubs and trees, or a brick wall of mellowed tones, rise these glorious spikes of misty blue and lavender, giving wealth of color and distinction and charm to far-flung vistas of garden enchantment.

The Delphinium is being so generally used in our gardens in this Puget Sound country, I think, because of its outstanding merit among perennials—its quick growth, its hardihood of constitution, making it practically immune from disease and mildew; its adaptability to soils of varying character, and (when well-established) its prolific bloom and glory of color and form. These qualities are sufficient reasons for its popularity.

In all our summer flower shows it is interesting to see the quick response of gardeners and flower lovers to the appeal of the Delphinium. At the Annual Rose Show in Seattle—the principal event of the year in horticultural circles of this Pacific Northwest region—much enthusiasm and eagerness manifests itself over the Delphinium exhibits. A successful grower can rely upon a steady demand for his plants and cut flowers.

Where bold decorative effects are sought for, either in the house or garden, Delphiniums have pride of place. Happily, Delphiniums are not (like some of the aristocrats of the garden) an expensive luxury; nor are there hidden mysteries connected with their successful culture; the veriest tyro may grow superior Delphiniums. Our garden magazines and horticultural societies are giving us much valuable information these days about Irises, Roses, Dahlias, Peonies and the like and doubtless a national Delphinium society may soon be launched to take its place in the ranks of similar organizations. The Pacific Coast might well take the lead along such lines of endeavor. Perhaps the Delphinium will become as characteristic of Puget Sound gardens as the Lilac bush and Daylilies were of old New England gardens. From San Rafael, California, we learn of the Vanderbilt hybrids; here in the Northwest we have reason to rejoice in the achievements of O. M. Pudor, of Puyallup, Washington, in his painstaking culture of the Delphinium.

WHETHER one prefers the white or the black eye; the single or the double flower; the many-branched stalk or the straight, tall stem with thickly studded flowers, is a matter of individual choice. Certain it is that no flower in its entirety now grown in our gardens has more compelling charm than the Larkspur. If one goes across the Sound and through the Straits of San Juan de Fuca to Victoria one finds charming gardens there. Large and small, elaborate and simple, but everywhere the evidence of the true gardener's instinct which is characteristic of British traditions. Readers of THE GARDEN MAGAZINE & HOME BUILDER will recall a description of Mrs. Butchart's famous garden a few miles from Victoria. Here in the latter days of June may be seen a gorgeous display of Delphiniums grown in such quantity that their superlative value for pictorial effect is finely demonstrated. One brings away a memory of towering spires of vivid blue and dusky purple consorting well with the riot of color that June brings to the garden. Seeds from this Vancouver Island garden and from other places where Delphiniums are grown are easily procurable, whereby gardeners in other parts of the country may grow these far Western strains of Delphiniums.

In a delightful rock garden in Victoria, I was introduced to two members of the Larkspur family

A THREE-INCH DELPHINIUM FLOWER

No wonder that the Larkspur has leapt into prominence in gardens of the Northwest, when it takes on a splendor like this. The flower above is natural size, a hybrid seedling (Glory of Puget Sound strain)

LARKSPURS LIFT THEMSELVES TEN FEET

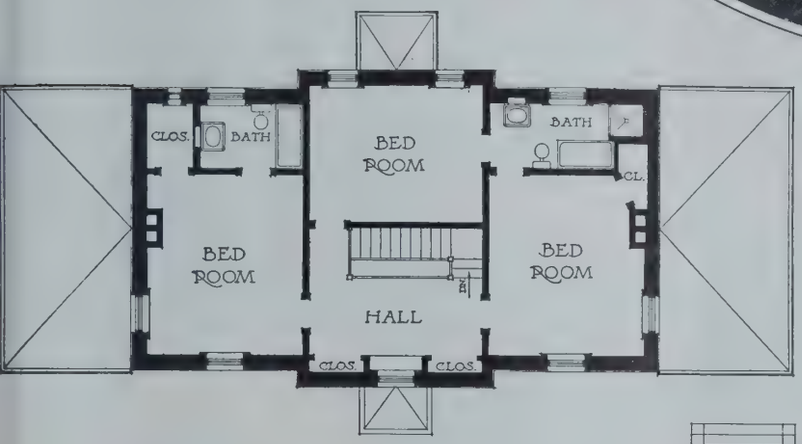
In the garden of Mr. O. M. Pudor at Puyallup, Washington, where conditions are evidently quite to their liking

hitherto unfamilar to me, namely, Delphinium nudicaule of California origin, if I mistake not; and Delphinium tatsienense. The former runs contrary to most members of its race and has flowers of orange scarlet hue while the other was of a deep blue. Both were low-growing, about twelve inches high; and of airy, graceful habit, and commend themselves to a home in the rock garden.

A MARYLAND HOME in the MODERN MANNER

Designed by
HOWARD SILL, Architect

There is a traditional staunchness about this dwelling which links it reminiscently with the fine brick-built homes of an earlier period scattered throughout the middle South. Its forthrightness of line and construction, too, bespeaks a maximum of space and of comfortable living



There is a sort of fascination in mulling over house plans no matter how static one's living conditions, for most of us are perpetually playing with the idea of improvement and something can be learned from nearly every plan—interesting variations of space division, stairway solutions, treatment of windows and so on. "The essential structure remains"; says Mr. Lewis Mumford aptly, "but the covering changes and passes, like civilization itself, when new materials, new methods of work, new ideas and habits and ways of feeling, come into their own." For the prospective home builder such preliminary thoughtful study is not only entertaining but valuable, serving as it does to crystallize ideas, thus making the task of the architect easier and the prospect of a house satisfying to the owner nearly a surety

THE CANTERBURY-BELL

RUTH GIPSON PLOWHEAD

An Old-fashioned Poetic Flower that Seems Ever New—Success from Spring-Sown Seeds and How To Coax Bloom from June Till October even Through Sunny Summers in Idaho

SUPERLATIVES are almost essential to the seed-catalogue man who would describe in sufficiently alluring terms the hundreds of varieties of flowers he wishes to sell. So we need not take too seriously the word painting of any one man upon a given flower. But when we find so many joining in the praises of the Canterbury-bell, with such expressions as "most exquisite," "most charming," "beautiful"—with one dealer even declaring it the most beautiful and useful of all tall growing biennials, we know that it is a flower that is at least worthy of a place in our gardens.

It is certain that the Canterbury-bell has an unusual number of points in its favor. It has a long season of bloom; wonderful colorings in the pastel shades as well as the deeper tones; is desirable for massing and low hedge effects; makes a splendid specimen plant when grown singly; and is more than unusually effective for indoor decorations.

The Campanula is a half-hardy biennial, and while some garden books recommend August or September planting of seeds for the following season's bloom, I much prefer the spring sowing of seeds. These plants, from spring-sown seeds, if they winter well, are of such splendid size and vigor, that they not only flower early, but send forth long sprays simply laden with exquisite bells of white, pink, rose, lavender, or the deeper purple shades. Of course the smaller seedlings from the fall-sown plants will flower later in the summer and help keep up the succession of bloom.

The Canterbury-bell will, if properly pruned, give a succession of flower blooms, much as an everbearing Strawberry plant produces its several crops of berries. Even while the first flowers are blooming, if you look carefully along the stem, you will find new buds forming on the same flower stalk. So do not make the mistake of a friend of mine who, when trimming back her plants, cut off this same stem, for if you do so you will destroy most of your next crop. Just be careful to snip off each flower head as it fades, and in several weeks new bells will be nodding on this stem. My second and third bloomings were almost as lovely as the first. Toward fall the plants grow rather ragged and shabby, but even as late as middle October there are a number of bells in bloom and dozens of new buds forming.

After the first June blooming it is well to pay special attention to watering, fertilizing, and cultivating the plants. We know by the way these flowers thrive in England and the Pacific Northwest that they are fond of moisture and plenty of shade. Still in Idaho I find them very adaptable, for though our summers are long and sunny, they grow equally well in sun or shade, though the largest and finest blossoms are picked from spots partially shaded. Our water is provided by a weekly irrigation through ditches, when the whole yard looks as though a miniature freshet had descended upon us.

THE seeds are small and look much like poppy seed. They germinate quickly and require little care throughout the summer. With us, the great problem has been to winter them well, for like many half-hardy plants they are likely to find the winters too cold if entirely unprotected, and to be killed by kindness if covered too warmly. The protection of a coldframe is of course the best, and boxes form a good shelter; though the latter may prove unsightly, for a number of well grown Canterbury-bell plants requires considerable space.

Campanula medium, the type is most generally grown, but the variety calycanthema or Cup-and-saucer, as well as the double Canterbury-bells are often grown, though to me they never are as graceful as the simple form.

For indoor decoration where quantity of color is desired the Canterbury-bell is especially useful. It masses wonderfully well and several large sprays, arranged in a wicker basket or jardiniere fall in most graceful effects. It is very hard to arrange this flower in the low bowls without the use of the perforated flower holder which fits inside the bowl and helps keep each stem in its proper place. On account of the firm substance, the Canterbury-bell is a splendid indoors keeper, and a bouquet properly cared for should last a week at least.

IN OUR Idaho garden the Canterbury-bell has never been troubled with insect pests or any diseases, and if a few of the June flowers are allowed to go to seed, it will self sow, providing more seedlings than one can possibly use.

CANTERBURY-BELLS GROWN IN MRS. PLOWHEAD'S IDAHO GARDEN

The very name "Canterbury Bell" is like a swinging echo of far-off days and the light grace of the flower itself lends fairy-like touch to the indoors. Properly cared for, such a bouquet will often last a week or more

This fireplace, set in its frame of beautifully simple paneling, is certainly the focal point of the living-dining room at "Jane's Acre", the little week-end home of Mr. E. P. Mellon, Architect, whose skill is evident in every sympathetically rendered detail.
(Other views on pages 380 and 381)

HEARTH AND HOME

PHIL M. RILEY

Origin and Significance of the Fireplace
Practical Considerations for Comfort on To-day's Hearthstones

Photographs by Schuyler Carteret Lee and courtesy of Metropolitan Museum, Arthur Todhunter, W. Irving Forge, Lewis & Conger, Edwin A. Jackson & Bro., H. W. Covert Co.

THERE is no denying the fact that the hearthstone long has been and still is the center of family life. The family lacking a fireplace in the living room yearns for one, while the family having one would not part with it for anything. An open fire symbolizes warmth, good cheer, and also much that is more instinctive than apparent. One has to go in imagination far back into the hazy past in order to understand the full significance of such time-honored phrases as "hearth and home," and "keep the home fires burning."

Sociologists assert that the tribal fire of primitive peoples was their most sacred possession, and that they worshiped it as a deity; also that the idea of building a roof and four walls originated in the need of protecting the fire on the hearth. The early tribal house, therefore, was in effect a temple to the fire god. Family life became possible only when the individual was permitted to withdraw his own share of fire from the tribal fireplace. The fire on the family hearth then became an intimate household god zealously tended, because to have it go

In the days when a fire must be started with flint and tinder, a pair of bellows was a necessary tool, and this Cape Cod fire lighter was considered a wonderful invention and aid

out was both a practical and a spiritual calamity. It could not be relighted from the fire of another family; that was considered profanation. It had to be reproduced laboriously by the friction of two pieces of wood, and with due religious observances.

Thus the fireplace was originally the very basis of home life, and its sentimental and symbolical appeal to-day represents a partial survival of the instincts and traditions of innumerable generations of our ancestors.

Throughout the Middle Ages, the Colonial period in America, and for a considerable time thereafter, the fireplace was a practical necessity. It provided the only means of heating the house, and much of the cooking was done by it also, or in an adjoining brick oven. Indeed, the hanging of the crane was regarded as a signal event in establishing a new home, and often a cast-iron fireback bore the date of erection of the house and the name. initials, or coat of arms of its owner. Each of the principal rooms had its fireplace, and often a large parlor, drawing room or library had two fireplaces, usually at opposite sides or ends, though rarely on the same side. The hearth-stone was the center of family life, and architects and builders, therefore, very properly made the mantels and chimney pieces with which they embellished the fireplace the architectural center of each room —the gem in a setting of beautifully wrought interior woodwork.

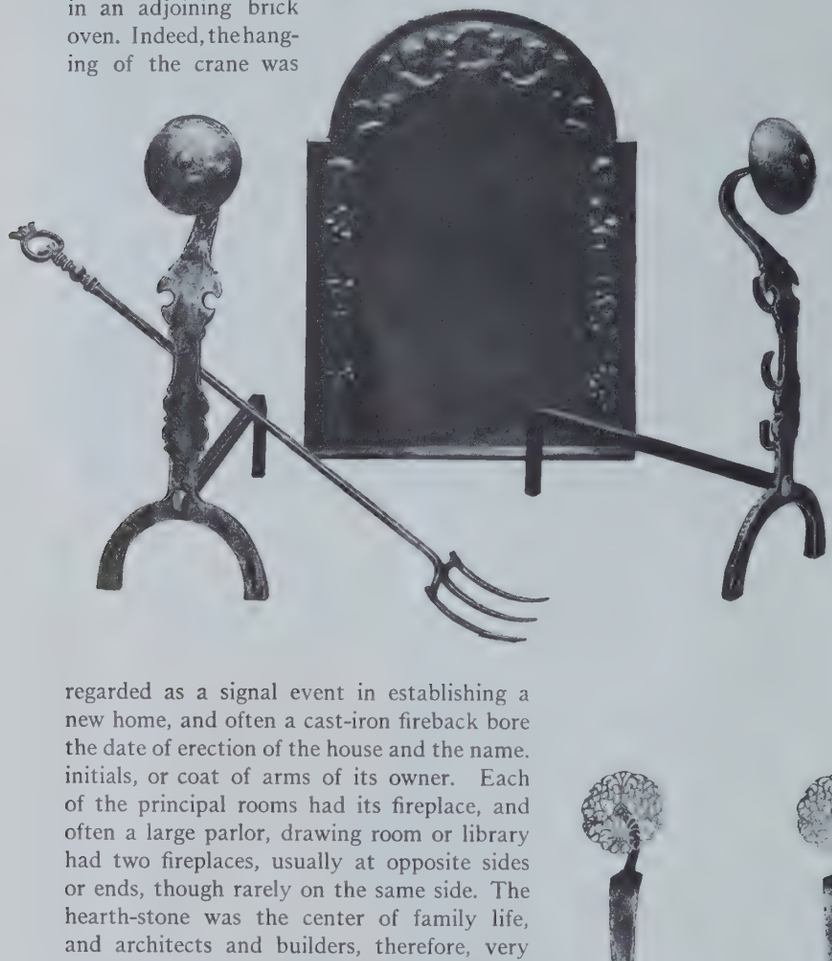
Everything that could possibly lend richness and color to the Colonial homes of those far-off seventeenth century days was brought over from England. Every ship came heavily loaded with so much massive furniture that one no longer wonders that it took two or three months for the boats to labor across. Gay upholstery was held in highest esteem, and next to that metalwork was most highly prized to lend sparkle and brilliancy to the rooms. Pewter, wrought iron, and brass are mentioned in the earliest inventories, and no fireplace was complete without its fire-dogs—big and little. The small "doggs" (so called because from earliest days these guardians of the fire had dogs' heads as decorative motifs) were set far back in the fireplace to keep the back log in place.

Going back through the long lists of Colonial possessions, one comes across that of Governor Eaton of Connecticut, who in 1657 "owned numerous andirons and fire-dogs, a cast-iron fireback, fire pans and tongs—enough for many fireplaces." The prices of these andirons varied (because of their design and material) from 5 shillings to 50 a pair. "They were always accompanied by shovel and tongs" says one authority, "but the poker is never mentioned; wood fires did not require it."

There were chimney pans and fire pans, foot stools to be filled with coals and carried to the unheated churches to keep the feet warm during two and three hour sermons, cranes for holding the iron cooking pots, iron stands for keeping food hot and iron spits on which to prepare the family roast—all part of the fireplace equipment of these early days. As luxury gradually crept in, we learn of a New England home owner who in 1651 was "the very proud possessor of an iron fender and a toasting iron tipped with silver."

Fireplaces did not always draw well and green wood was hard to start into a blaze, so a pair of bellows was part of the very necessary equipment, and it is recorded that one Captain Tinge had a pair with a brass pipe and also had a "great pair of brass andirons valued at three pounds ten."

While wrought iron was commonly used, it was not as decorative as brass, and the richer the home the more brass candlesticks and andirons did it boast. Especially was much brass used around the wide hospitable hearths of New Amsterdam where its rich gleam added much to those rooms already bright with shining pewter and gay-colored tiles and pottery.

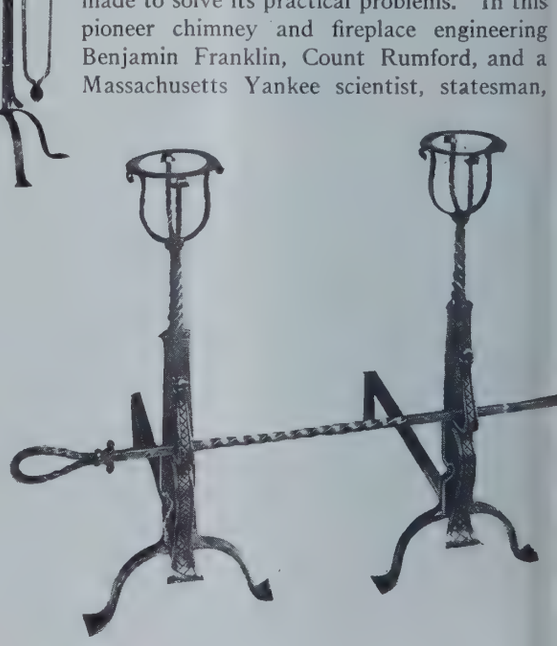


This Georgian fireback is reminiscent of the days when the fireplace was depended on to give as much heat as possible and when bricks must be protected. The large fork of wrought iron with brass handle can be used both as a poker and for lifting logs in a very large fireplace

BUT the great fireplaces of olden days, deep hearthed, high breasted, and often broad enough to burn full length cord wood, were not notable for fuel economy or heating efficiency. Much of the heat of the fire, however great, passed unchecked up the straight, open flue of an immense chimney, and the strong current of air thus created drew much cold air from outdoors into the room through every crevice about doors and windows, making the room drafty and cold except in the immediate vicinity of the fireplace. Despite the large size of the chimney flues, these early fireplaces often smoked abominably in windy weather, because the down draft in the chimney was not controlled in any way.

Apparently it was not until well toward the middle of the eighteenth century that much scientific study was devoted to fireplace construction, or that any serious attempt was made to solve its practical problems. In this pioneer chimney and fireplace engineering Benjamin Franklin, Count Rumford, and a Massachusetts Yankee scientist, statesman,

An unusual set of fire tools in hammered steel with lace-like medallions of polished brass



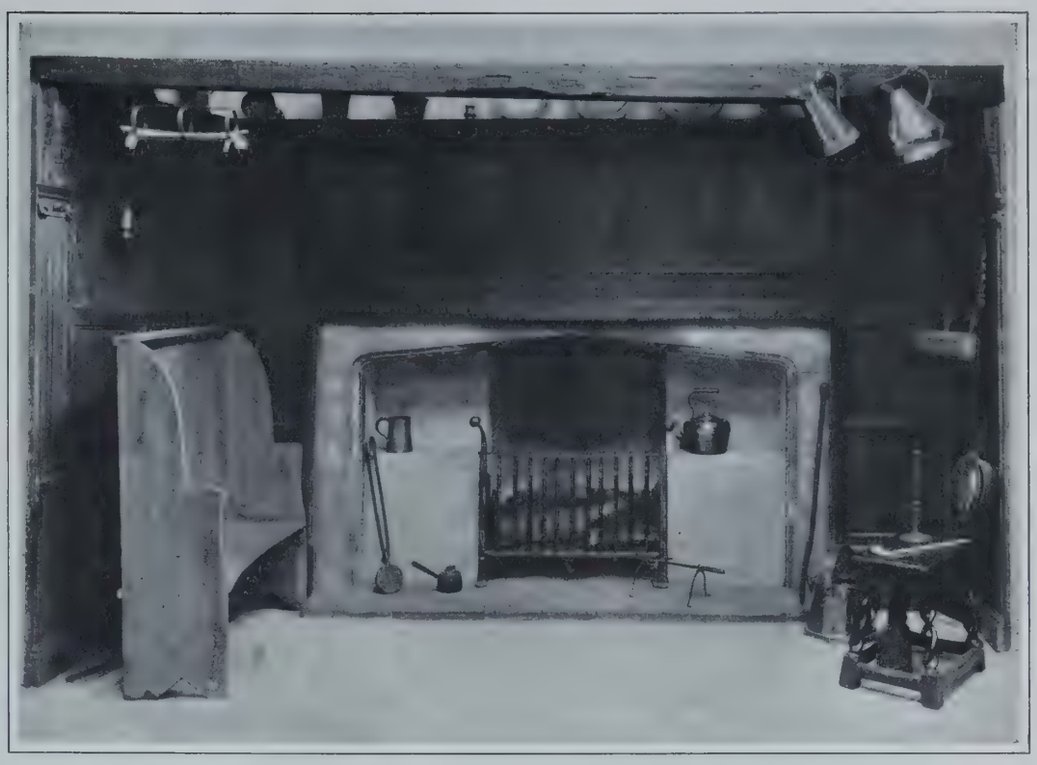
The originals of these andirons came from a palace in Seville. Of wrought iron with interesting cut-work on the tool-rests, they are highly decorative, while their open caps for holding pots to keep their contents hot show how utility and beauty meet hand in hand

and scholar named Benjamin Thompson, took the lead.

Rumford published the results of his investigations, with designs and specifications, in an essay dated 1798. This work performed a valuable service in pointing out conclusively the practical defects of high, deep, broad fireplaces and big, straight, open flues, with their scanty warmth, wasteful use of fuel, their violent draft and tendency to smoke. He reduced the fireplace to a practicable size and greatly increased the radiation of heat by shallow wall depth and by splaying the side-walls in such a manner as to give the fireplace the general shape and function of a reflector.

More than half a century previously, however, Benjamin Franklin had in some measure solved the heating problem of his day in another way. As early as 1742 he devised the "Pennsylvania fireplace," better known as the "Franklin stove," which he described in a pamphlet dated 1744. The Franklin stove threw more heat out into the room and less up the chimney. It saved fuel, heated all the room, and while retaining the charm of the open fire, embodied something of the heat-radiating principle of the hot-air furnace.

It is not surprising that the Franklin stove soon came into considerable popularity. Fireplaces were accordingly bricked up to accommodate it, a stove-pipe being run into a hole in the brickwork for connection with the chimney. Gradually, however, the "air-tight" stove supplanted Franklin's open grate. Later, central heating plants for hot air, steam, and hot water were developed for installation in the basement and connected by pipes with registers and radiators in the various rooms above. They gave more even heat, consumed less fuel in heating an entire house and were more easily tended than several open fires. For a time houses were built for the most part without fireplaces, although many old houses are to be found with large round-topped hot-air registers set into the wall and embellished with regulation fireplace mantels. But gradually a sense of loss began to be generally felt. These registers and radiators, however ornate or otherwise, warmed the flesh, but they left the spirit cold; there was no poetry, sentiment, or significance whatever about them.

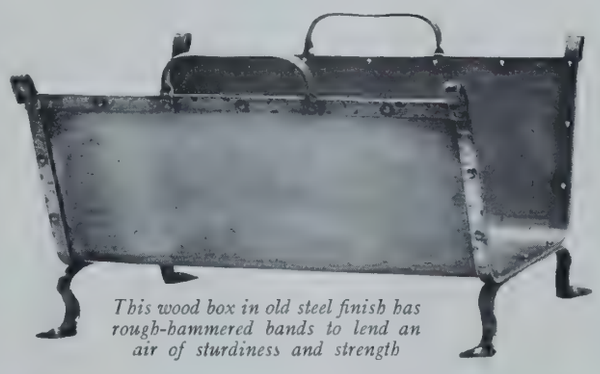


There is an air of completeness and comfort about this old fireplace in its setting of antique oak that holds suggestion for homebuilders to-day—the hob or little shallow shelf to keep things hot, for instance, and the various other appurtenances which make hearthstone living a delight. This chimney corner has been transported bodily from an inn at Wokingham, England, and has all the amusing features of its own earlier day, even the rack where habitués kept their church-warden pipes (upper left)

The outcome was obvious. The central heating plant has remained, of course, as a practical and economical necessity, but recent years have witnessed the general reopening of bricked-up fireplaces in old houses, the addition of fireplaces in houses that were built without them, and to-day few new houses are erected without a fireplace in the living room at least. To a degree it is a luxury, perhaps, though not a very expensive one, yet it is something for which all able to do so are very glad to pay. Besides, on chilly spring and autumn days and rainy summer evenings it provides a cheap and convenient auxiliary heating plant.

Our passage through these various stages of development in heating the home has taught us that an open fire warms more than the body, the hands, and the feet; it reaches the heart. Harking back as it does to the tribal campfire, it stirs some primitive instinct in man. "Hearth and home" are indeed synonymous; there is a whole ritual of domestic worship which centers around an open fire. A blaze on a hearth is more than a luxury, more than a comfort; it is an altar fire in the home.

To kindle the crackling log or glowing coal on the hearthstone is to strengthen immeasurably the ties that bind the family more closely together. As sons and



This wood box in old steel finish has rough-hammered bands to lend an air of sturdiness and strength

The very lines of these old andirons convey a sense of lively motion almost as if the whole row were ready to jig—rather an amazing vitality the early craftsmen poured into their simple mediums of expression, making bits of metal come thus alive under the strokes of their hammers. To-day, as in the first days of its origin, the andiron is a distinctly decorative feature of the American home

WHERE WALL SURFACE AND FIREPLACE ARE ONE

There is a very satisfying sense of unity in this treatment, and the paneling about fireplace and cupboard is a beautifully restrained breaking and use of space. The absence of the usual shelf, too, rather adds dignity, and color is introduced by the frame of Dutch Scripture tiles. Part of an old Long Island homestead built in 1739 and now permanently on view at the Metropolitan Museum of Art

daughters marry and go forth to establish homes of their own, those who remain find in a cheery blaze on long winter evenings a bosom companion in whose comforting presence loneliness is greatly alleviated. And when friends drop in, its convivial appeal is a standing invitation to gather and commune in the most primitive and enduring of fellowships, the fellowship of the fireside.

HEARTHSTONE considerations are indeed among the most important in building or remodeling a house. That no modern house can ever be quite a real home without a living room fireplace needs no further argument. That it may be a worthy shrine of those undying sentiments and traditions with which its past history is so inseparably connected, however, bespeaks careful attention to every one of the many details of fireplace design, embellishment, and equipment. It is a fascinating subject which, in the better results obtained, amply repays as much study as every home owner, actual or prospective, can possibly give to it. A competent architect, of course, can design a good fireplace without the assistance of his client, but much of the pleasure of having and using a fireplace lies in an understanding of the why and wherefore of everything about it. And correct fireplace design is a bigger subject than many persons realize.

Enough has been written here to indicate that the fireplace to-day serves two purposes; the first, of utility in providing the cheerful warmth of an open fire efficiently and well; the second, of appearance in beautifying an object of practical use and making it the principal feature in the architectural scheme of the room in which it occurs. Thus the subject at once divides itself into two parts: interior and exterior fireplace design.

Interior fireplace design is purely a matter of correct engineering and right building construction. It embraces the provision of a fireplace properly shaped and proportioned to radiate maximum heat for the amount of fuel used. Below this there must be an ample ash-pit with ash-dump in the hearth and ash-pit door in the basement for emptying. It includes a suitable and correctly located chimney flue of adequate size for the fireplace opening, one which will insure ready combustion of the fuel and carry all smoke and gasses up the chimney. It also involves the provision between fireplace and chimney flue of a rightly shaped and proportioned smoke chamber and smoke shelf to control the down draft of the chimney; also in the throat thus formed a suitable damper to maintain a volume of draft in proportion to the amount of flame. This damper also assists in deflecting the down draft of the chimney upward again and thus removes any possibility of the fireplace smoking. All of these matters, through long experience, have been reduced to an exact science which every home owner should understand.

EXTERIOR fireplace design is purely a matter of architectural embellishment and interior decoration of the room in which it is located. It lends to the mantel or chimneypiece accompanying the fireplace the distinctive charm of national or period style, of appropriate and beautiful materials, and of nice workmanship in their use. A mantel or chimneypiece is good only as it accords with the house in general and the room in which it is placed. Certain types of mantels have come to be associated with certain styles and periods of houses, and a wise choice therefore calls for a considerable degree of intelligence and appreciation.

Supplementary to this latter division of the general subject is the question of appropriate fireplace furniture, such as andirons, basket grates, fire sets, wood boxes and baskets, coal-scuttles, fire lighters, etc. These articles, when well chosen with due regard to the character of the room and the mantel, add much to the attractive appearance of the whole, but upset the whole scheme of things if out of harmony. In this same category may be included mantel candlesticks and lamps, also electric wall brackets.

TWENTY CENTURIES of GARDENING in CHINA

Green Gardens of Ancient-day Emperors—Glasshouses in 1772—Seasons and Moods as Motifs

H. H. MANCHESTER

EDITORS' NOTE: *Just what we owe the Orient by way of garden inspiration is perhaps too vague for tracing, but certain it is that beauty has a quiet habit of traversing mountains and seas and making herself felt everywhere. Such accounts as Marco Polo's and Sir William Chambers's later description (both quoted below) lead us to conclude that the gardens of America, Europe, and China are not so widely unlike as sometimes imagined, but are merely varying expressions of man's impulse for gaiety and for repose. It is interesting always to follow the origins of things, and this concise recital has significance for the antiquarian as well as for the lover of plants. Some of our readers doubtless remember Mr. Manchester's series on "A Pictorial History of the Garden" (begun in January, 1922) and will welcome, with the zest of those who have tasted a dish and liked it, this latest story of gardening in very early times.*

THE garden in China goes back to ancient times. We read, for example, that in the Han Dynasty, which extended from the 2nd century B. C., to the second one A. D., the rulers constructed so many gardens that agriculture was interfered with and the people incited to revolt. Yohan Koan Han, according to tradition, built artificial hills and rockeries one hundred feet high, and brought running water many miles through an aqueduct in order to produce artificial falls and rapids. About 300 A.D., Shi-tsung founded in Honan the garden Kin-kuh, the relics of which still exist.

The first Buddhist emperor of China reigned at the end of the 4th century A. D., and from about that period we begin to find notices of gardens around Buddhist temples, cloisters, and burying grounds. Little concerning them at that date has been handed down, but we know that the Buddhists introduced various plants from India, and, at least later, imitated in their gardens scenes connected with the life of Buddha.

About 400 A. D. T'ao Yuan-ming, who resigned an important office because he would not "crook his knee," wrote of his garden and Chrysanthemums: "Homeward I bend my steps. My fields, my gardens, are choked with weeds; should I not go? . . . The place is a wilderness, but there are yet the old pine and my chrysanthemums."

In the middle of the 8th century, the garden Tau-li in Chan-gan, the capital of the Tang Dynasty, was famous throughout the land. At that date the much revered poet, Li Tai-po, held a garden party there during which he established the following rule: "Such a night as this, when blossoms are beautiful and breezes are gentle, has been given us for our amusement, lighting candles, holding the wine glass, and composing poems. Those who can make no poetry shall drink three jars of wine in imitation of the ancient garden party of Kin-kuh."

How the flowers were regarded in the 11th century is disclosed in a poem by Chou Tun-i, who lived from about 1017 to 1073 A. D.: "Lovers of flowering plants and shrubs we have had by scores, but T'ao Yuan-ming alone devoted himself to the Chrysanthemum. Since the opening days of the Tang Dynasty, it has been fashionable to admire the Peony; but my favorite is the Waterlily. How stainless it rises from its slimy bed! How modestly it reposes on the clear pool—an emblem of purity and truth! Symmetrically perfect, its subtle perfume is wafted far and wide; while there it rests in spotless state, something to be regarded reverently from a distance, and not to be profaned by familiar approach. In my opinion, the Chrysanthemum is the flower of retirement and culture; the Peony, the flower of rank and wealth; the Waterlily, the Lady Virtue *sans pareille*. Alas! few have loved the Chrysanthemum since T'ao Yuan-ming; and none now love the Water-lily like myself; whereas the Peony is a general favorite with all mankind."

A GARDEN OF TWELVE HUNDRED YEARS AGO

Founded in the 8th Century, the garden of Tau-li was famous throughout the land; from a painting by Kiu-Ying, 15th Century, A. D.

THE fullest Mediæval evidence concerning the Chinese garden of that date comes from a poem describing his garden by Ssu-ma-kuang. He was a celebrated statesman who was born about 1019 and rose to be prime minister. About 1070 he resigned and busied himself with history and literature. Some fifteen years later he returned to public life, but died the next year. His description of his garden is of the greatest importance because it mentions all the chief characteristics of the Chinese garden as

they existed seven centuries later, and is proof that even at that early date, the central conception of the Chinese garden was already put into force.

Ssu-ma-kuang remarks introductorily that whereas others have built palaces which hide their sorrows or expose their vanity, he had made himself a solitude in which to pass his leisure and to please his friends. In the center was a villa where he had assembled five thousand books through which to interrogate the wise or converse with antiquity. Then follows the description of his grounds, which is so important as to necessitate quotation in part. First he speaks of the water scenery: "At the south one finds a pavilion in the midst of a pond from which flows a little stream that falls over the cliffs to the left. This forms a deep basin from which spread out five prongs like the claws of a leopard, where innumerable swans breed and disport themselves. Over the edge of the first prong, which falls from cascade into cascade, rises a cliff, precipitous and overhanging, resembling the trunk of an elephant. There, high in the air, is an open pavilion from which to take in the fresh air and view the ruby sunrise. The second branch is divided into two canals which wind in a gallery bordered with a double terrace like a festoon, where palisades of Roses and Pomegranates form a balcony. The western branch bends to the north of an isolated gate where it forms a small island. The shore of this isle is covered with sand, shells, and stones of many colors. One part is planted with evergreens; another is made more picturesque by a hut covered with thatch and Roses, and by fishers' caves. The two other streams form a plateau enameled with flowers which they served to keep fresh. Sometimes these leave their bed to produce little pools framed in tender grass. A few brooks quit the level of the plateau, and descend in narrow channels, where engulfing and breaking themselves in a labyrinth of rocks which dispute their passage, they roar and burst into foam and silver spray."

Close by was a wilder scene which was described by Ssu-ma-kuang as follows: "To the north of the large villa are little pavilions placed at hazard, one of which rises on a mound above the others like a mother among her children. The others are fixed on the slope of the mound; many occupy the little gorges which form the cliff and are more than half unseen. All this part is shaded with groves of Bamboos intersected with sandy foot paths where the sun never penetrates."

The next section was more cultivated and devoted to flowers and trees. "The part toward the east," in the words of Ssu-ma-kuang, "forms a small plain divided into bands, squares, and ovals, where old Cedars ward off the cold north winds. All these patches are filled with odorous plants, medicinal herbs, flowers, and bushes. Spring and zephyrs are never absent from this delightful spot. A little grove of Pomegranates, Citrons, and Oranges, always loaded with flowers and fruit, forms the horizon, and separates the rest of the garden to the south. In the middle is a little green pavilion to which one mounts by an insensible incline which has many turns like the spirals of a shell, and at last arrives at the summit of the knoll. The borders of this slope are carpeted with grass, which is relieved at one place and another with seats which invite one to rest and contemplate the scene from all viewpoints." Thus even the Chinese garden nine hundred years ago had one section which was cut into patterns and finished in a conventional style, in strong contrast with the natural picturesqueness and wildness maintained in other parts of the ground.

The final section of Ssu-ma-kuang's garden was intended as an awe-inspiring retreat. "To the west an alley of Willows with hanging branches leads to the border of a large stream which falls from the heights of high rocks covered with Ivy and wild herbs of various colors. The environs are naught but barriers of jagged rocks thrown bizarrely together, which rise in an amphitheater wild and savage. At the base one finds a deep grotto which widens little by little and forms a sort of hall, with a vault rising to a dome. The light enters in only one opening where hang branches of Woodbine and wild vines. This hall is an asylum against the burning heat of the dog days. The rocks part here, and behold! a sort of road hollowed from the wall along which are seats. A fountain which springs from this spot fills the hollow of a great rock from which it tumbles in little cascades, which, after having wound amongst the clefts, are all reunited in a reservoir constructed for bathing. This has one opening, somewhat curved, through which it discharges itself into a basin that is at the foot of the grotto. This pool lies amongst rocks which are rugged and grotesque, and piled up in the form of a barrier."

A detail of the garden of Kin-kuh founded in Honan about 300 A. D.; from a 15th Century painting by Kiu-Ying

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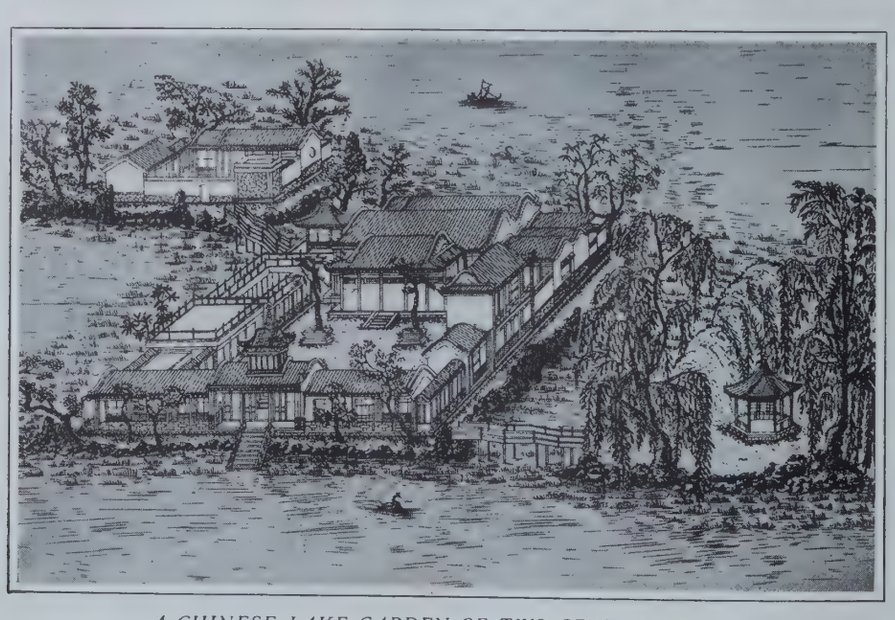


A CHINESE LAKE GARDEN OF TWO CENTURIES AGO

Seen and described in detail by Attiret, a French missionary (see opposite page), this, to western eyes, strange lake garden of the Chinese Emperors is typical of its time (18th century) and country

EVEN from the partial account given above, it is evident that the central principle of the Chinese garden almost a thousand years ago was to include a variety of the most striking, interesting, and beautiful scenes of nature. There was a rocky solitude, a lawn carpeted with grass and flowers, thickets of wood, and water scenery. It was, of course, practically impossible to find all of these characteristics in one spot so situated as to be available for a country villa. As a result the Chinese nobleman selected a site containing as many natural advantages as possible, and artificially added the other characteristics. Hills, waterfalls, and lakes, were all constructed on demand. This involved an enormous ex-

pense, but to the great Chinaman expense was seldom a barrier.

Thus the Chinese garden not merely embellished nature, but actually reconstructed it, though on so large a scale that the artificiality was scarcely perceptible. We find confirmation of this in the account of Marco Polo, who lived in Peking at the end of the 13th century. "On the inner side of the palace about a bow shot off," says Polo, "there is a hill which has been made by art from earth dug out of the lake; it is a good hundred paces in height, and a mile in compass."

Polo's testimony as to the replanting of trees by the great Khan is also of importance: "This hill is entirely covered with trees that never lose their leaves, but remain evergreen, and I assure you that wherever a beautiful tree exists and the emperor gets news of it, he has it transported bodily with all its roots and the earth attached to them, and planted on that hill of his. No matter how big the tree may be, he gets it carried by his elephants; and in this way he has got together the most beautiful collection of trees in all the world."

One curious conceit of the Khan, who, it will be remembered, was a Mongol, is noted by Polo as follows: "He has also caused the hill to be covered with azure ore which is very green . . . hence it is called the green mount. On the top of this hill, moreover, there is a fine big palace which is all green inside and out. And thus the hill, and the trees, and the palace formed a charming spectacle, and it is marvelous to see their uniformity of color."

The gardens of Kin-kuh and Tau-li which we have already mentioned, are both represented in a pair of paintings by Kiu-Ying, who flourished in the Ming Dynasty, and probably in the 15th century. The paintings are so old and faded that the details can scarcely be distinguished, but it is still possible to observe the mishapen trees which were favored by the Oriental gardener, the flowers in large pots, and the long pavilions in the background.

GARDEN OF THE IMPERIAL PALACE, PEKIN, 1796

"The Chinese gardeners take nature for their pattern, and their aim is to imitate all her beautiful irregularities," wrote Sir William Chambers toward the end of the 18th Century on his return from an eastern sojourn. Though it may seem a far cry from Chinese gardens of two centuries ago to the American garden of to-day and Oriental influence is not perceptibly traceable in our horticulture, the same underlying motive, nevertheless, has brought to birth these widely diverse expressions of beauty

IN THE 17th century Liu-tzu summarized the art of landscape gardening as follows: "The art of laying out gardens lies in joining an aspect of cheerfulness, a luxuriant growth, shade, solitude, and repose, in such a manner that the senses may be convinced by this imitation of rural nature. Diversity, which is the main advantage of a free landscape, must be sought in a judicious selection of grounds and a succession of chains of hills and valleys, gorges, brooks, and lakes covered with aquatic plants. Symmetry is wearying, and ennui and disgust will soon be excited in a garden where every part betrays restraint and art."

In the middle of the 18th century when the formal architectural garden had established itself in France and the rest of Continental Europe, F. Attiret, a Jesuit missionary in China, sent an account of the emperor's gardens which had an important influence as it sharply contrasted the Chinese and French styles. Quotations from this would read very much like those from Ssu-ma-kuang. Attiret emphasized the pavilions, hills, rocks, cascades, tortuous streams, valleys, groves, islets, bridges, winding walks, and collections of variegated flowers and shrubbery.

To the same purport in 1772, Sir William Chambers, who had been a resident of China, contrasted the Chinese garden with the formal garden of France on the one hand, and the barren natural garden of England on the other. He declared: "The Chinese gardeners take nature for their pattern, and their aim is to imitate all her beautiful irregularities." His account is far too long for even an abstract, but we may summarize the main points. While imitating nature, the Chinese at that period were no enemies to straight lines, because they might be productive of grandeur. Even geometrical patterns might be employed in small positions. Their regular buildings were generally surrounded with artificial terraces which were embellished with waterworks and stone bridges. Immediately around the main villa, the grounds were laid out to provide an open view, and were well kept. But the rustic buildings were surrounded either with gloomy or luxurious scenery.

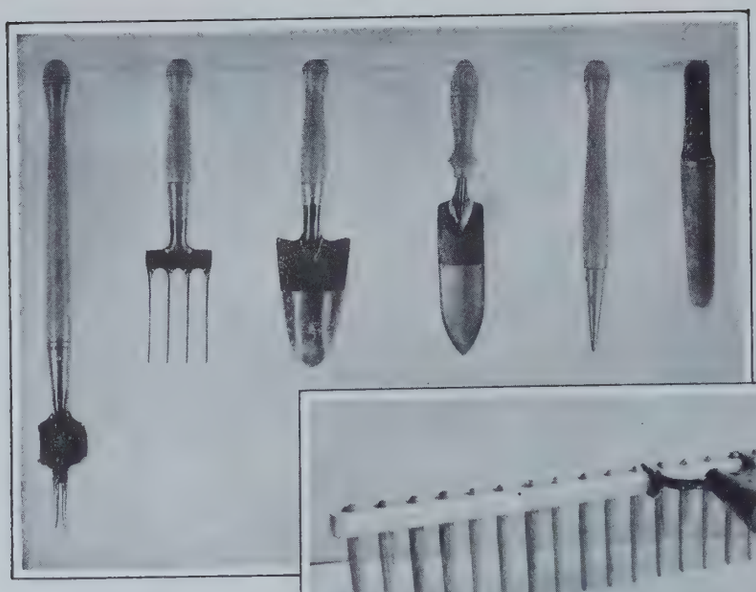
The usual object was to provide a great variety of scenes, and unite them into a striking whole. The large gardens had scenes even for the different times of the day. More important were the sectional gardens for the different seasons. The winter garden contained all sorts of evergreen trees and vines, and in some places even torrid vegetation, which during the winter was protected with glasshouses and heated with subterranean fires.

Among the trees and flowers of the spring garden, may be mentioned Lilacs, Laburnums, Almond and Peach trees, Roses, Honeysuckles, Hyacinths, Daffodils, Violets, Primroses, Crocuses, Daisies, and many species of the Iris. Their summer gardens were the most elaborate of all. They abounded with lakes, rivers, and waterworks of every description, together with all sorts of summer trees and plants. The spirit of their autumnal gardens was heightened by placing among them decayed trees and dead stumps to emphasize the decline of the year.

Besides such gardens, there were others constructed to appeal to the emotions. The pleasing sort contained the gayest products of the vegetable world interspersed with the most picturesque water scenery and other forms of nature. Their scenes of terror were composed of gloomy woods, deep valleys, impending barren rocks, dark caverns, and impetuous cataracts. The trees there were ill-formed, and seemingly torn to pieces by the tempest or lightning. There were also supernatural scenes in which were used faint lanterns, the pale images of ancient kings, and solemn organs played by subterraneous waters.

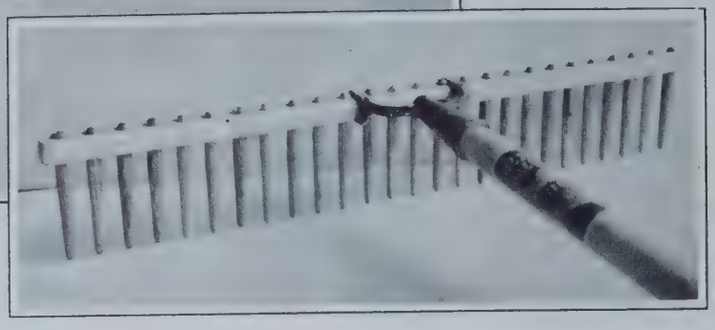
Chambers likewise emphasized the importance of the water scenery—the cascades, winding streams, islands, and bridges. Most extraordinary of all were the submerged habitations, consisting of cabinets and galleries built entirely under water and decorated with shells and sea plants, as well as with statues of all the gods of the deep.

Some Modern "Machines" & "Articles" of Gardening

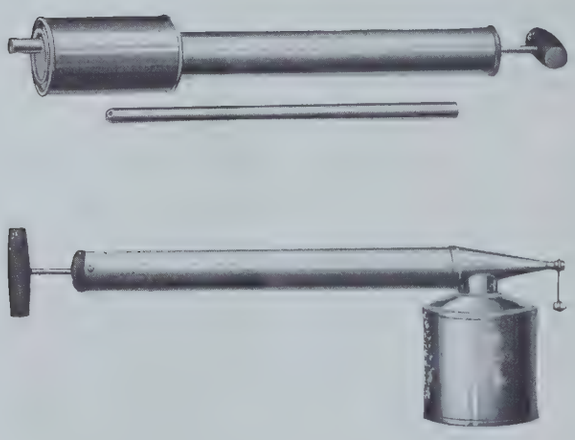


A set of handy small tools having a multiplicity of uses. From left to right: daisy grubber, short-handled spading fork, large trowel, hand trowel, dibbler, and leather-sheathed Trowel. (Lewis & Conger)

With this rake having teeth set in a bowed head only a few teeth come into actual contact with the surface of the lawn when the shaft is raised, the teeth performing their work perfectly. The curved rail throws the material toward the center making it easy to handle. (Piqua Handle & Mfg. Co.)



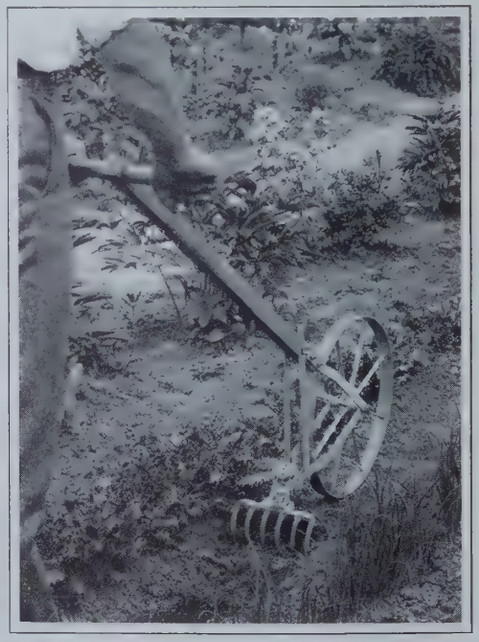
IN HIS "Encyclopedia of Gardening" published about a century ago, J. C. Loudon in describing garden tools makes this quaint classification: "*Machines* or compound implements * * * and *Articles* adapted, manufactured or prepared so as to serve various useful purposes"



Auto-spray and duster of 1 and 2 quart capacity make an ideal outfit for the owner of the small garden. The sprayer is a continuous atomizer for disinfectants, insect poisons and fly oils, while the Duster will be found invaluable for applying dust to Rose bushes as well as all garden crops. (E. C. Brown Co.)

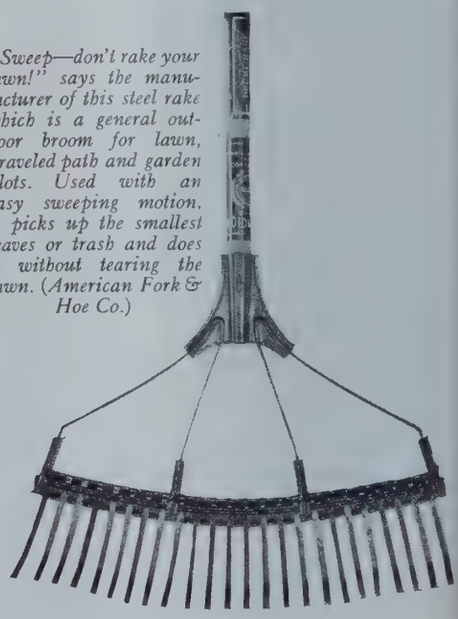
The Out-U-Kum Weed Puller is an ingenious device for removing the weed and its roots without taking up any of the turf alongside. The two prongs go one on either side of the root which is thus pulled out with but little effort. (C. S. Norcross & Sons)

A spring attachment on the side of the blade of this flower cutter holds the stem of the flower, preventing it from falling to the ground. It is especially convenient for thorny flowers or those hard to reach while holding a flower basket. (Lewis & Conger)



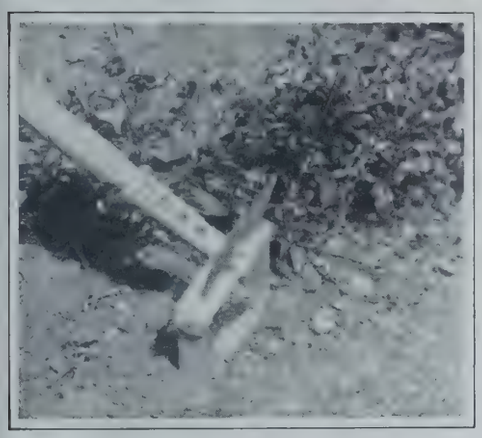
As a substitute for a hoe and a backache there is nothing better than this handy little wheel cultivator with 6 attachments easily changed and fastened with a patent hitch. (Gilson Mfg. Co.)

"Sweep—don't rake your lawn!" says the manufacturer of this steel rake which is a general outdoor broom for lawn, graveled path and garden plots. Used with an easy sweeping motion, it picks up the smallest leaves or trash and does it without tearing the lawn. (American Fork & Hoe Co.)



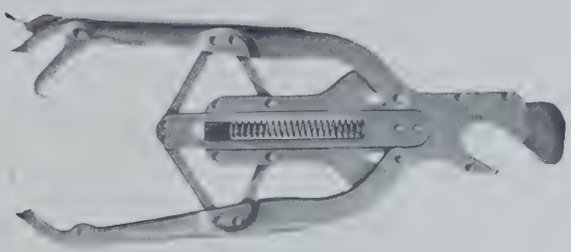
Who has not sowed seeds by the old laborious method only to find that they were planted most irregularly? With a simple tap! tap! with one hand while the other holds this seed-sower, seeds may now be sown as closely or sparsely as one desires. The slide in the cup regulates the opening according to the size of the seeds whether they be Sweet-peas or Mustard. (Sowrite Inc.)

A whole garden outfit makes up the equipment of this garden basket that contains a trowel and fork, budding and pruning knives, scissors, pliers, wire-cutter, twine and rule. (Lewis & Conger)

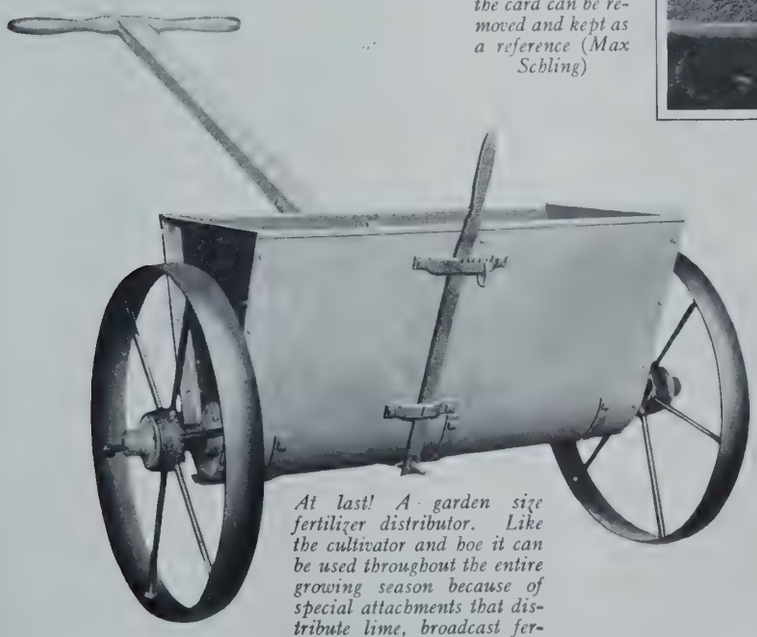


Any garden job can be turned into joy if the right kind of tool is taken to work with. That job of hoeing, can be done more easily with this double edged loose cutter weeder. (Gilson Mfg. Co.)

When labels wash off, much valuable information is lost to the interested gardener. Such records may now be kept intact through an entire season by means of the Seenite Label. The label, absolutely moisture proof, is enclosed in the glass case transparent on both sides, the whole fitted to a wooden peg which is then stuck in the pot, flat, or open ground. At the end of the season the card can be removed and kept as a reference (Max Schling)



With a downward stroke that cuts without crushing, this pruner will be found an excellent tool as well as strikingly different from the usual clipper. (Lewis & Conger)



At last! A garden size fertilizer distributor. Like the cultivator and hoe it can be used throughout the entire growing season because of special attachments that distribute lime, broadcast fertilizer, dust with insecticides, or spread salt for asparagus beds or to kill weeds. (Theodore Hofmann)

Of many and varied uses is this Gardener's Friend Cultivator. It makes the rows for planting, covers the seeds, cultivates well, can be used as a hiller and is very effective for keeping the ground in shape around shrubs. (Wilbern Share & Forge Co.)

The National Garden Association

Formed to promote the annual observance of National Garden Week

Leonard Barron, F.R.H.S., President

Honorary Vice-Presidents: J. Horace McFarland, Mrs. Francis King, Mrs. Russell Tyson, Mrs. Thomas G. Winter, Mrs. Samuel Sloan, Mr. Frederick Newbold, Mr. Robert Pyle, Mrs. John D. Sherman.

Coöperating Societies: Society of American Florists and Ornamental Horticulturists; National Plant, Flower and Fruit Guild; American Dahlia Society; American Iris Society; Ontario Horticultural Association; American Forestry Association; Women's National Farm and Garden Association; Wild Flower Preservation Society; National Horticultural Society; The Agassiz Association; The School Nature League; Society of Little Gardens.

NATIONAL GARDEN WEEK has become a national annual event because there is a definite need for it. Conservation and reforestation must be urged; wild flowers must be preserved; school gardens and city playgrounds must bring to children of the cities a new idea of what American citizenship can mean; towns must be cleaned up and the responsibility of each individual shown.

All this was embodied in the broad plan back of the first National Garden Week—a plan that has made of this week one of the greatest national forces for good.

SUGGESTIONS FOR NATIONAL GARDEN WEEK

NO MATTER which state you live in, it is rich in its own varieties of trees, shrubs, vines, and flowers that grow well there. If each city and town would plant these in its parks, streets, and private yards the first and most important step would have been taken toward making a "State Beautiful."

Plan for National Garden Week in Your Town. Do not fear to do this lest you be alone in this work. You will find that every Garden Club, each Woman's or Man's Club, each civic organization will help.

The following suggestions will prove of interest:—

First, determine clearly what you wish to do in your locality.

Decide what is the worst feature of your town; plan to abolish it.

Decide what is the best feature; plan to preserve it.

Decide what is the greatest civic need. Is it parks? Play grounds? Better streets? Trees in home grounds and along streets? Flowers? Gardens? Public interest?

Work out your plan carefully, along lines most necessary and valuable. Take your plans to your local Board of Trade, Chamber of Commerce, or Village Board. You must arouse their interest and secure their assistance.

Your plans are of interest to every local newspaper. Tell them exactly what you are striving for. They will aid you in stimulating interest and enthusiasm.

ASK LOCAL CLUBS TO HELP

ASK every local club in your community to work with you—every fraternal organization, church society, Campfire Girls, Girls and Boy Scouts organizations. Make your campaign such as will enlist the active assistance of every individual.

Adopt for your city some flower that grows readily in your locality. Get local business organizations to offer seeds and prizes for home gardens, best flowers, and various phases of city beautifying.

Select unattractive vacant lots in your town. Gain their owners' permission and allot these to various clubs to turn into beauty spots. Get banks, business houses, etc., to offer prizes for the greatest improvements. This stimulates friendly competition.

Third Observance
National Garden Week
April 19-26

HAVE A CLEAN UP CAMPAIGN

DECIDE on a local "Tree Day," when each home owner will agree to plant at least one tree! The city council on that day should be urged to plant trees in parks and along all highways.

Plan to preserve your city's historical spots. Make them accessible and attractive.

Urge Zoning laws to protect your famous buildings and residence streets from invasion by business houses.

Plan to do away with all unsightly bill boards and advertising.

Stress welfare plans for your city's congested districts by urging parks, play places, and gardens.

URGE SCHOOL GARDENS

URGE school gardens at every school. Urge gardens at all orphanages. Remember that the children of to-day are the citizens of to-morrow.

Aid Park and Highway Commissions.

Start gardens at your nearest State Prison. San Quentin and Nashville prisons have "Gardens Beautiful." These are proving their value in many ways as important phases of prison welfare-work. And the gardens at Sing Sing have brought a new meaning of the word "hope" into the lives of these imprisoned men. No more necessary or helpful phase of a "State beautiful" campaign could possibly be conceived!

Plan drinking fountains for horses throughout your city. Remember that humanity is but another word for beauty.

Destroy breeding places for flies and mosquitoes. Start a Junior Civic League to aid in this.

Get noted speakers to address civic meetings on beautifying.

To arouse enthusiasm, arrange pageants and flower shows.

Coöperate with your railroad to beautify your local station.

Maintain booths in city railroad stations where commuters can leave their surplus flowers for the city's sick.

Get your physicians to give health-talks on the benefit of exercise and the necessity of vegetables in the diet. Gardens supply both.

Get your Fire Commissioners to inaugurate a city-wide clean-up campaign! To make a flower grow where the rubbish-pile grew before lessens fire risks!

Get in touch with your State Agricultural College.

If every individual in every town of every state would work to improve and beautify his community, we should have the most inspiring spectacle of history—an entire nation working to make life better and more beautiful!

The many possibilities of this week are shown in the program carried out last year by the Doylestown (Pa.) Nature Club:—

Industrial Lecture at School.

Wild Flower preservation urged.

Prizes offered to school children for best posters on such preservation.

Seeds supplied to pupils for fall Flower Show.

Prize offered for child's best flower bed.

Prize to adults for best garden during summer.

Seeds supplied to the prison gardens, Deaf and Dumb Home and for public flower beds.

Adoption of town flower; planting of this encouraged everywhere, also beautification of all unsightly spots in the town.

Prize to High School Scholar for best essay on "The Value of National Garden Week."

Art Departments of Public Schools asked to design posters for display advertising National Garden Week.

Florists asked to observe Garden Week.

Merchants asked to decorate their windows.

Articles published in local papers.

Trees planted in Bird Sanctuary.

Trees and shrubbery planted in parks.

Receptacles kept at R. R. terminal where commuters could drop flowers to be sent to the sick in city slums.

Moving picture theaters asked to show garden and nature pictures.

Write to us for programs and leaflets, also booklet "A Clean Up Campaign," Program, Constitution and By Laws for Garden Clubs. Please address all communications to the Association at Garden City, N. Y.—Ellen D. Wangner, *Secretary.*

AMONG OUR GARDEN NEIGHBORS

Readers' Open Column for Exchange of Comment and Experience

In Defense of Bay Windows

TO THE EDITORS:

Victoria, even before she was laid to rest, had fallen into some measure of ill-repute. For with Wilde and Swinburne, Rosetti and William Morris, arose the creed of the 'nineties and the creed despised Victoria and all her works. Then came Edward, with George close on his heels, and the young Georgians stepped in with ruthless stride, shook the queen in her very grave and made of her name a by-word. It has come to be synonymous with all that is ridiculous or ugly, ostentatious and priggish and useless. There has been a revolution in taste and, like all revolutions, it has had its innocent victims, its destruction of the good in company with the bad.

Now, I like bay windows; in fact, to use the true feminine verb: I love them. And their place cannot be taken, in my estimation, by what one particularly objectionable architect insisted upon calling a "solarium."

He came out to see our latest wild venture in the way of purchases: an old, seven-room farmhouse that rests among priceless hills.

"Of course," said he, indicating with a most deprecating wave of his arm, my bay—the delight of my heart—, "you are going to tear out that Victorian bay and put in a solarium."

"Of course," I replied, with more promptness than courtesy, "we are not going to do any such thing."

For in a bay there is subtlety of form, a reticence of view, a modesty about the competent manner in which it brings in air and sunlight, that no solarium can give. Oh, I grant you that it defies all the rules of straight-line harmony and that its roof, viewed from the outside, is often lacking in true regard for blended form. But does the roof of a sun-porch do any better? And what has the sun-porch to offer from the standpoint of the interior that a bay cannot give and give more gracefully?

My bay faces sou'-by-sou'east-by-sou' west making longer and pleasantly irregular just the right sort of low-ceilinged room. A pink Rambler Rose and a small but adequate porch cut it off from too much west. To the east it is open, glancing past the straying branches of a Syringa where a robin's nest is occupied, year after year, by the same family, and looking full upon a grove of slender Elms that shut out the road. But south, ah! south. Directly under the big, central window with its wide lower sash that gives a view of country unbroken by a bar of wood, is Larkspur—Delphinium belladonna, and Queen Mauve. Can you see the panorama as it broadens sou'west to where the pink Rambler Rose makes a Pompadour's bower with my Delphinium?

For my bay is panoramic as no three-sided rectangle of glass could ever be; it is not an entity, as are most sun-porches, a separate, selfish consumer of all the brightness and air that is the allotment of my home. It shares graciously with the rest of the living-room the sweep of hills—the smooth, ever-changing, little-mountain hills. From the fireplace, which is half-way across the room, I can sit in winter and see sunshine on the snow that is spotted black with evergreens. And in the little bay in summer and in early spring I write or mend while my wee daughter plays in the sun at my feet and Sally, the dirtiest of white Persian kittens, finds a cushion in the chair opposite mine and settles down to a sun-nap while I work.

My bay is more than a group of converging lines; it is an outlook, a focus-point for my whole room. Even the fireplace is subservient to it, fading into a background of auxiliary furniture; giving its share of warmth and cheer, too, but always with an eye on the happy panorama to the south.

Such is the function of a bay: to extend, to enrich, to make brighter, and it does those things with a grace and completeness that is not achieved by the sun-porch. I wish that modern architects would stop to consider before destroying bays with a ruthless, Georgian hand, and that they could be brought to see some beauty and a measure of wisdom in trying to re-establish them in a place of favor. For in a house with a bay window there are, somehow, always happy days, and the memory of them is undying.—ELEANOR A. COX, *Michigan.*

Acetic Acid Treatment for Cuttings Works!

TO THE EDITORS:

Last winter I used the acetic acid treated sand for cuttings and continued the treatment through the entire season.

I succeeded in rooting Junipers which I have not been able to root previously, and everything else in the sand came very much more quickly and was very much more satisfactory than in any previous year. I tried the same kind of treatment last summer with great success and I recommend its trial by everybody.

I used a teaspoonful of the acid to a gallon of water and applied it daily.—FRANK BAILEY, *Munnysunk Nurseries, Locust Valley, L. I.*

—A full account of the acid treatment of the cutting soil was given in GARDEN MAGAZINE & HOME BUILDER for November, 1924.

Pruning Trees as Specimens

TO THE EDITORS:

I need a little information on pruning or training Magnolias (white flower), Acacia Baileyana and Jacarandas. I planted 20 trees last March and the two last have grown from 14 to 18 feet and look the same as a Fir tree. Should I cut these back to 8 feet from ground and six feet from ground to first branch, cutting back the branches to about 1 foot each? I want specimen trees.—H. T. WILLOUGHBY, *Cal.*

—You speak of training for specimen trees. The term "specimen tree" has several meanings. A specimen tree in the strict sense of the word is a tree so distinctive in form, texture of foliage, inflorescence, or combination of those qualities, that it appears to advantage when planted alone. Many specimens are also very effective in groupings. A specimen may also mean a tree or shrub pruned in such a way as to assume a round-symmetrical, conical, oblong, or pyramidal shape.

The pruning of young ornamentals follows certain well-defined principles. Nursery stock when first distributed is seldom uniform in appearance, necessitating a different treatment for each tree or shrub. To have a really symmetrically growing specimen it is necessary to establish a strong leader. Should the tree be in the form of a straight whip, with few or no laterals, it should be cut back about one third of its length. A nursery tree already possessing a strong leader and several good laterals should not be cut back too severely, but may be thinned out.

All laterals should be equally spaced around the trunk of the tree, with from 6–12 inches between laterals. This follows the same method used in pruning fruit trees, although more latitude is allowed in the pruning of ornamentals.

The three trees mentioned—White Magnolia, Jacaranda, and Acacia Baileyana—are in reality specimen trees, each exhibiting a distinctive charm of its own, if permitted to grow unhampered to full maturity. The Magnolia grows into a very symmetrical tree, the Acacia is very beautiful in the soft, undulating contours, while the Jacaranda, although of upright growth, assumes an umbrella-like appearance.

The Acacia Baileyana has a rather weak stem during the first year of its growth; this should be securely tied to a stout stake at several points. The tree branches freely; excess laterals should be cut out. If too straggly in growth, cut back to lateral growing in the direction that you wish branch to take. This particular species of Acacia is not so amenable to the pruning shears as some other species, like Acacia melanoxylon, for shaping into round-symmetrical forms. Personally, I believe its natural form is to be preferred.

The Magnolia if guided during its first stages of growth, and if straggly branches are cut back, will assume naturally a symmetrical shape. Aside from directing the main stem, Jacaranda should not be interfered too much by pruning.—A. M. WOODMAN, *Cal.*

Concerning Some Plants Asked For

TO THE EDITORS:

Adonis vernalis asked for by Mr. Richard Haughton is listed by Bobbink & Atkins as Adonis amurensis fl. pl.

L. E. Hurst inquires about Spireas and Astilbes. Astilbe japonica, A. Arendsi, A. ulmaria, Spiraea kamschatica, S. palmata and palmata elegans, as well as the little filipendula and Acanthus mollis all flourish here. The Blackberry-lily also grows here. Although over 1000 feet up our seasons are short.

For J. R. Dickson's needs (page 132, October, 1924) I would suggest Spiraea margarita, Caryopteris mastacanthus, or Astilbes. As no variety of climbing Rose is mentioned, the date of termination is vague, but all the plants I have listed above have good foliage as well as bloom.—E. D. KNIPE, *New Hartford, Conn.*

Mr. Richard Haughton asks where he may procure Adonis vernalis. It is listed in the catalogue of George D. Aiken, Putney, Vt. —HAROLD G. RUGG, *Vermont.*

Bloom from Crocus to Cosmos

TO THE EDITORS:

I am sorry to be obliged to report that my old-fashioned Hydrangeas did not blossom last season. I have four plants, all pretty well located and not all in one plot, so, as they are flanked by other plants that flower readily, it would seem that they have other peculiarities besides wintering outside. I presume they all came from one plant, though, as I remember, they were discarded greenhouse specimens when I received them. This is not to say that they did not flower ever, for a florist always throws a plant away if he thinks it would take too long to get it in salable form after it has blossomed. I may add that a fifth Hydrangea (that I gave to a friend) from the lot that I had, gave one bunch of blossoms the year preceding, but had none last summer. It has been kept continuously in the house and is one of a group of other plants that grow and blossom well. I am of course much disappointed, for when I found that these plants wintered right along growing to the very end bud, I think for three years, I hoped that I had found a strain of hardy plants that could be brought to some special account. I would like some suggestions. My people say throw them away as worthless, but I am not quite ready to do that.

The flowering season with us was especially satisfactory, so far as growth and blossoms are concerned. I am a sort of "discursive" plant raiser, having in my back yard garden more than 150 genera of plants, including about 75 Hybrid-tea Roses and other Roses to match—I manage to keep something especially interesting in flower from Crocus to Cosmos. I suppose that the neat gardener would look on the collection as more of a swamp than an orderly display! We are now trying to make the most of hardy herbaceous perennials, as being showy without demanding a great amount of work, though we do not mean to discard annuals and tender bulbs.

The season, as it advances develops insect enemies in great array. Aphis, slugs, worms abound, mildew attacks the Roses and there is a fungus that has about ruined the Trumpet-vines, in spite of sulphur and other supposed fungicides. Still, in spite of this, I am not ready to give up the Crimson Rambler Rose, as some have done. It does not mildew any worse than Frau Karl Druschki, Betty or some others. I am afraid that the new Paul's Scarlet Rambler is going to mildew some.

For the all-round Rose we find Ophelia well in the lead. It can be made to develop great vigor, with leaves fairly as strong looking as a cabbage leaf. It has few enemies, for a Rose, the buds are unsurpassed, though it does not last long enough to please the florist. For lasting we have, always first, Francis Scott Key and then Columbia, etc. For "impossible" colors we have of course, Hadley, Los Angeles, and others.—JOHN W. CHAMBERLIN, *Buffalo, N. Y.*

Praise That Stimulates

TO THE EDITORS:

GARDEN MAGAZINE & HOME BUILDER is very attractive and I know people will like it doubly for its contents and helpfulness. Literature that helps build up the home and the garden aids in character building though we cannot have too much of it because it is such clean and wholesome reading.—FLORENCE VAN FLEET LYMAN.

The Friendly Fellowship of Gardens

TO THE EDITORS:

I am enclosing a picture of Mrs. John M. Ransom's garden, Tullahoma, Tenn., that I thought might be of interest to you. Most of the Iris is from my garden originally. Mrs. Ransom has definitely promised to open her garden next year to the community at my earnest solicitation. She has distributed a great many plants and flowers already and I believe she will be able to put Tullahoma on the flower garden map. This past year in Nashville, twenty gardens were opened to the community against only one three years ago. Doing pretty well I think. Began first with Daffodils, and so following Sweet-peas, Sweet-william, Iris, Peonies, Annuals, Dahlias, Chrysanthemums. Several gardens are also bird sanctuaries. Some gardens are open on a specified day while others are open all the time.

I have no doubt that the number of gardens

SHARING YOUR GARDEN

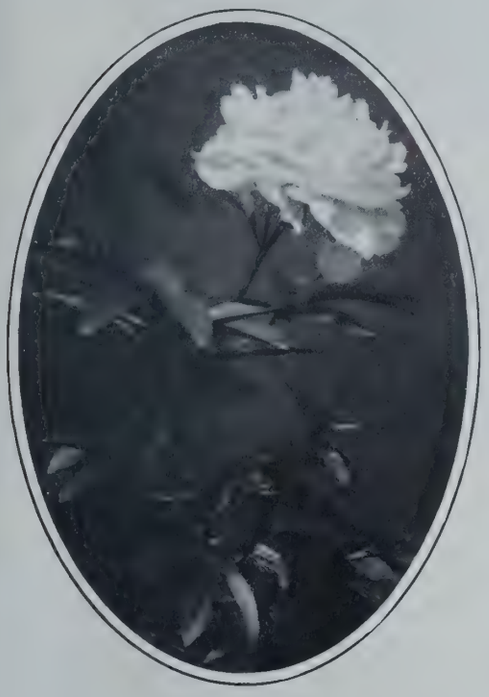
Everywhere there is a growing realization of the civic value of beautiful gardens and a growing willingness to share garden joys with one's neighbors. Iris-time in Mrs. John M. Ransom's Tennessee garden which will be open this spring to visitors (see accompanying text)

open to the community will be largely multiplied next year. I find that most garden lovers are proud of their efforts and are glad to show them, after they once get over the feeling that they are "showing off" which is entirely beside the question.—KATHERINE P. WRIGHT, *Nashville, Tenn.*

A Peony from Louisiana

TO THE EDITORS:

The Peony has made admirers, and of them all none is more ardent than the flower enthusiast living in a climate little favorable



HOW MUCH DOES FROST HELP?

Ordinarily Peonies are not easy to grow in the South, but after a hard frost, unusual in the region, this six-inch bloom appeared in the garden of Miss Sallie Reeder at Covington, Louisiana, which would indicate that a certain amount of cold is necessary for success with this plant. It would be interesting to hear from other Southern gardeners who are growing the Peony

to its cultivation. Perhaps indeed it is because of the difficulty attendant upon the successful growth of this desirable flower of our springtime gardens, that it has become a favorite with many people of the Gulf states.

Just why the Peony is not usually a success in the warmer parts of the South, has never been fully determined to my knowledge. Possibly the cause lies in the difference in winter temperature: that the roots require frost or, at any rate, low temperatures to bring about the chemical changes necessary for them to produce the lusty growth and profusion of bloom that we so often see even in an old neglected garden in our colder climate. So when Nature favors a gardener of the warmer southern states with beautiful blooms it would seem to be a sufficiently rare occurrence to be worth bringing to attention.

The accompanying photograph was taken in the garden of Miss Sallie Reeder of Covington, Louisiana, in the spring of 1924. The plant had been brought from St. Louis, Mo., the year previous. At the time this picture was taken it bore this one bloom fully expanded, and in addition several buds which opened later. The open blossom was about six inches in diameter and of a delicate pink in color.

The plant had received no special cultivation or attention after being transferred to its new habitat. The winter of 1923–1924 was probably colder than is usually the case in this locality. In fact frost hard enough to kill tender vegetation occurred on several nights. If frost is then the determining factor, these cold nights may explain the appearance of blooms. It is also possible that many plants brought from colder regions may maintain their usual rhythm for a season or two. If this is the explanation in this case, we can be certain of it only by continued observation of the plant during the next few years.—ARAVILLA MEEK TAYLOR, *Lake Erie College.*

Luxuriant Choisya

TO THE EDITORS:

I am enclosing a view taken in my garden of a large bush of Choisya ternata. The plant is growing on the west side of the house and is even more shaded by an Orange tree. It blooms continuously in the early spring for almost six weeks.—MRS. R. G. STAPLETON, *Oroville, California.*

MEXICAN ORANGE
(Choisya ternata)

Easily grown out-of-doors in Southern California and Florida, a native of Mexico; bearing fragrant white flowers somewhat reminiscent of Orange blossoms; shown here as it grows at Mrs. Stapleton's garden, Oroville, Cal. (see letter above)

The Trifoliate Orange as a Hedge Plant

TO THE EDITORS:

Referring to "Walls and Hedges" in GARDEN MAGAZINE, October, 1923, page 79, which I read with interest, and reading "The Fence Coming in Favor" I am wondering why it is we see and hear so little of the Trifoliate Orange being used for hedges. A few decades ago, when it was advertised as a very ornamental, thorny, dwarfish, hardy, deciduous plant, requiring but little care, a son used it as a hedge between his lawn and street. Living in the city, I find a fence even more necessary than in the country. If we must needs have a fence, I would secure the maximum of efficiency and beauty for the minimum of time, cost and labor. In choosing between one of wood or iron construction, and one of the more beautiful hedges of evergreen or deciduous trees, the Trifoliate Orange is without a peer. If grown as a specimen tree its bloom is as pure white, as prolific, and as fragrant as those of other Oranges; its fruit though diminutive is as bright a golden color; being resinous it is not edible. Notwithstanding its wide advertising as most suitable for hedges I have seen this in but one hedge.——SARAH A. PLEAS, *Whittier, Cal.*

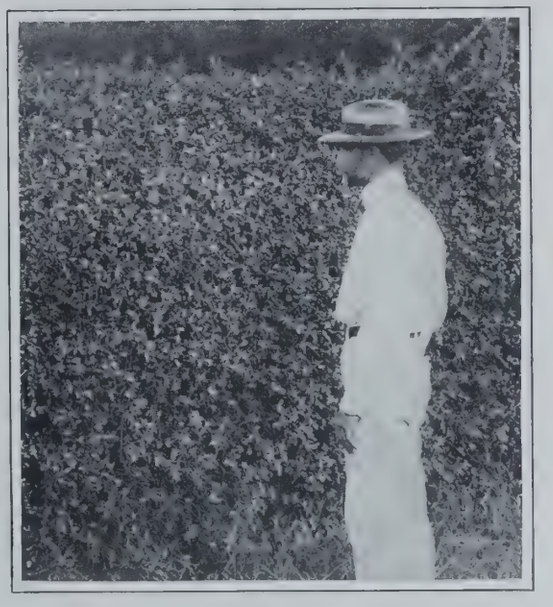
Two Little Worth While Annuals

TO THE EDITORS:

To those who have not already discovered it I recommend the little annual Asperula azurea setosa as one of the most accommodating, charming, amiable and altogether delightful and desirable of modest little plants.

First, it will grow in any and every soil and climate. It self-sows and therefore is early to blossom. Its fuzzy little gray seed heads are almost as decorative as its blue-lavender blossoms borne in great numbers on slender, graceful stems not over 10 or 12 inches high. It is a perfect addition to a bowl of Sweet-peas which always need a little spraylike thing to break their too solid masses and its color blends perfectly with any Sweet-pea color. Indeed that soft lavender-blue blends with anything.

Another most necessary annual is Matthiola bicornis; small, inconspicuous and almost negligible in the garden in a small vase or bowl for the "occasional" table even a few sprays with other showy flowers will fill the room with fragrance as evening comes on.—MRS. LEWIS DAWES, *N. H.*



A HEDGE SO STRONG YOU CAN WALK ON IT

The Trifoliate Orange or Poncirus (Citrus) trifoliata is hardy on the east end of Long Island where it both flowers and fruits freely. It makes an absolutely impenetrable hedge and the one here shown growing in Georgia would support a man walking on top

Hemerocallis and Iris from Seed

TO THE EDITORS:

Regarding Hemerocallis from seed, a subject on which Laura Jerauld Paxton of Indiana wanted information, allow me to offer the following: In the autumn of 1923 a local nurseryman gave me about a half pint of Hemerocallis seed. It was from a late blooming variety (or possibly two varieties) which the nurseryman listed as citrina. The seed was left in a cloth bag in a dark but well ventilated place over winter. There was no attempt to keep it at a uniform temperature. In the spring the seed was planted about a quarter of an inch deep in drills in a bed of convenient width. The soil was a rich, well drained sandy loam and the bed was in light shade in the afternoon. Very soon, in thirty days, I should say, the plants were up looking for all the world like grass or oats. The young plants grew rapidly and this spring I expect to transplant them to wider rows and by August, 1925, I think they will be large enough to bloom. I am quite sure that well defined species will come fairly true from seed and by sowing seed far apart and either thinning or transplanting when about two inches high and giving good care a pod or so of seed should in two years give a bed of blooming size plants. The best, if there is variation, can be kept for division and increase.

The Beardless Irises as I. pseudoacorus, versicolor, sibirica, orientalis, and the new Chinese species chrysographes, Bulleyana, Delevayi, Forresti, Wilsoni, and their hybrids, and the rare American, Iris setosa, can be handled this way although seed of pseudoacorus and versicolor are quicker to germinate if sown in fall. All should be sown in very early spring or even in a frame in late winter. The frame may be left open and a good snow will only help bring them up. However do not be impatient if rare sorts do not come up until late summer. Just be patient, keep the bed properly moist and lightly shaded, and they will come in time.—RALPH W. SHREVE, *Farmington, Ark.*

GARDENING FOR THE BEGINNER

THE MONTH'S REMINDER—FEBRUARY

As to Time and Place: In gardening practice a date can only be approximated as seasons vary and local conditions will have some influence. Generally the latitude of forty degrees at sea level and a normal season is taken as standard. Roughly, the season advances or recedes fifteen miles a day, thus Albany would be about ten days later than New York (which is latitude 40). The latitude of Philadelphia is a week earlier. Also allow four days for each degree of latitude, for each five degrees of longitude, and for each four hundred feet of altitude. Latitude 40 passes through Philadelphia, Pa.; Columbus, Ohio; Richmond, Indiana; Quincy, Ill.; Denver, Col.

How to Use This Guide: Suggestions as to the most important things of the month are given in this department so as to "remind" the gardener of the current duties. For routine details of such things reference should be made to standard handbooks and guides. It is impossible to make a complete manual of practice in each number of a periodical magazine. Yet timely articles will be found elsewhere in each issue, and references to back numbers will often solve the immediate question. Moreover, the editorial staff stands ready to help any reader with personal advice by mail. A self-addressed stamped envelope should be enclosed with the question.

Who Writes This: The advice and instruction in this department are the gleanings of many years experience in practical gardening matters by competent amateurs and others who have "been through the mill." The contributions are made from various sections of the country: for example, Mr. Jesse A. Currey contributes from Oregon; Mr. Theiss from Pennsylvania; Mr. Henry Gibson from Pennsylvania (formerly from New York); Mr. Sherman Duffy from Illinois; Mr. A. Kruhm from an extensive Eastern acquaintance; and, in addition, occasional notes from elsewhere and by the editorial staff and associated contributors of experience.

FEBRUARY is a transition month in the garden, for it sees the finishing of last year's garden work and the beginning of next year's. This is notably true in the case of the Grape.

Any other pruning ought to be done by this time, but usually it is not. Personally, I prefer to delay my pruning until near time for growth to begin. Then wounds start to heal over quickly. February fits into my scheme well, and usually finds me afield with pruning saw and shears.

GRAPE PRUNING AND CUTTINGS

I PREFER to do my pruning as late as possible, especially if I am to take any cuttings, and each year I do take anywhere from one hundred to several hundreds. By pruning late, one does not need to care for the cuttings so long a time. These must be kept cool and moist, and as the packing material, sawdust, moss, etc., will dry out, one must go through one's cuttings from time to time. Hence, the later they are taken, the easier it is in this respect.

But do not delay too long. All grape pruning must be done by the end of February. If delayed until later, the cut vines may not callus before sap flow starts and then the vines "bleed" badly. So make sure your vines are pruned before the month is gone.

AN INSECT CLEAN UP

EXAMINE your Plums and Cherries carefully for black knot, cutting out and burning every infected twig and branch. Finish up all other trees. Take scions for grafting now.

When pruning, closely examine each tree. On twig and stem you will often find the eggs of moths and caterpillars. Pick them off and destroy them. The little egg sacks are easy to see on the naked trees.

When pruning fruit trees, look carefully for "mummies" and gather all you can find. These dried remains of old fruits are loaded with rot spores and are sure to start fresh infestations of rot in the new fruit.

You can also give yourself a rare treat, if, when pruning, you secure some cocoons. Never a winter goes by that I do not find numbers in my trees. I cut the twig bearing the cocoon, stick it in my hat band, and so bring it eventually to the house. These cocoons are usually fastened on the wall within the screened back porch. And here, some months later, the beautiful moths emerge, and attract other like moths to the outer side of the screens. Once two cecropia moths emerged from the cocoons on the same day. These are gorgeously beautiful creatures, with a wing spread of probably five or six inches. Within a few hours the screen was hung with like moths that had been attracted to the porch. They fluttered about in a perfect cloud. I counted forty some, and probably did not get them all counted at that. It was a rarely beautiful sight.

CUTTING OF ORNAMENTAL SHRUBS

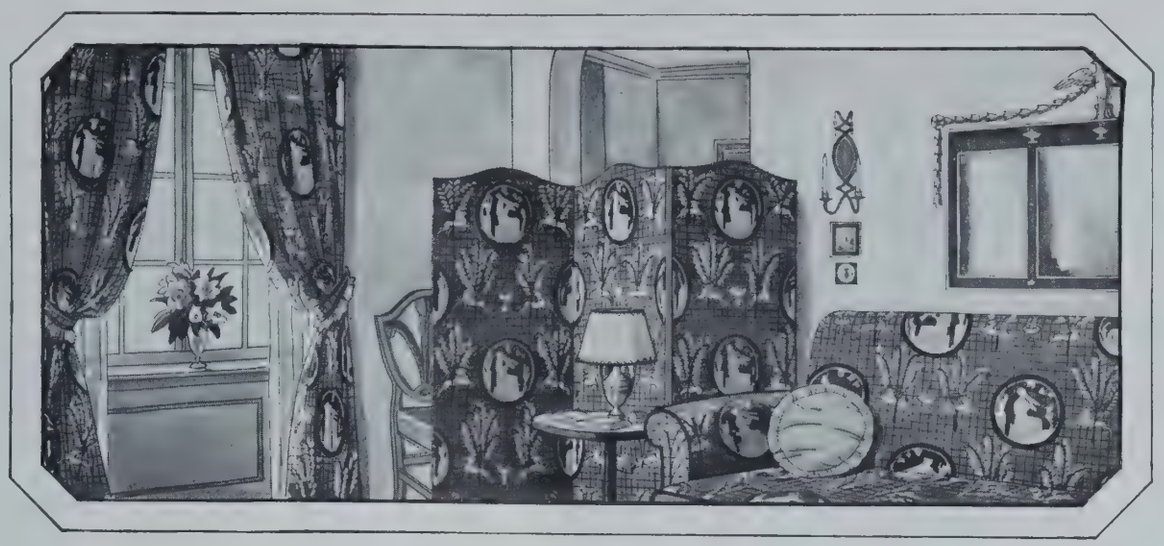
IF YOU have not taken all the cuttings you want, do so soon, before sap flow starts. Practically all vines and many shrubs can be raised from cuttings. If you have any particular vine or bush that your friends admire, it is a very gracious thing to set out a few cuttings and make plants for them. Or you can merely give them the cuttings, with directions for planting. My own garden is all the richer because of the dozens of plants that have come to me in this way from friends.

AN ACTUAL START

LATE in February sow Early Jersey Wakefield Cabbage. This must be done in flats, of course, and these must be kept in a warm, sunny place. The best place of all is right in the kitchen. That is because the kitchen is both warm and moist. The other rooms in the house are likely to be too dry for successful plant growth. The earth in the flats must be light loam. Sow thinly and cover lightly. When the plants are strong enough, transplant into other flats, planting the seedlings two inches apart each way. As growth starts, the plants can be exposed to colder air on favorable occasions. Later the plants can be hardened off in a coldframe.

Also start Celery this month. This seed is very slow to germinate, requiring perhaps three weeks. Unless one is careful, the seed-bed is likely to dry out and germination will be poor. A good plan is to sprinkle the Celery seed over the prepared seed-bed, and then lay a thin cloth over the seed. This cloth must lie close to the soil. A good way is to cut a piece of old muslin or an old handkerchief so it just fits inside the flat. Then smooth it down tight and wet it. Water can be

(*Continued on page 414*)



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IT has the lyric simplicity of an old folk song—this new printed linen.

Although its treatment is modern the Greek figure has the simplicity, the serenity, of those used in early Hellenic friezes and the medallion form enclosing it recalls the shapes designed by Huet for the famous Toiles de Jouy.

The antelope springing from behind a fern cluster gives an archaic touch to the fabric that is in contrast with the freshness of modern color in which the design is printed.

It is this liaison between the old and the new in decorative taste that gives the fabric its special interest.

The fresh jade background latticed with deeper green throws into bold relief the mauve and white of the design.

The same abundance of clear contrast so satisfying to the modern eye, is found in the other color schemes in which the design is shown—rose and blue, yellow and lavender, green and tête de nègre, blue and black.

Few fabrics more sensitively record the color trend of contemporary art than chintzes — a characteristic of theirs since the beginning. It is perhaps largely because of this that they have been so constantly in demand for more informal decoration.

Chintzes and linens in great variety of pattern—early and modern, oriental and floral are included in the Schumacher collection of fabrics for every decorative use and period.

They may be seen by arrangement with your own upholsterer or decorator, who will also gladly arrange the purchase for you.

F. Schumacher & Co., Importers, Manufacturers, Distributors to the trade only, of Decorative Drapery and Upholstery Fabrics. 60 West 40th Street, New York City. Offices in Boston, Chicago, and Philadelphia.

The restraint of its clear-cut classic design with the charm of its modern color gives individuality to this print

Printed linen of this type may be effectively combined with silk taffeta when used in conjunction with painted furniture

This printed linen is available in green and mauve, rose and blue, yellow and lavender, green and tête de nègre, blue and black

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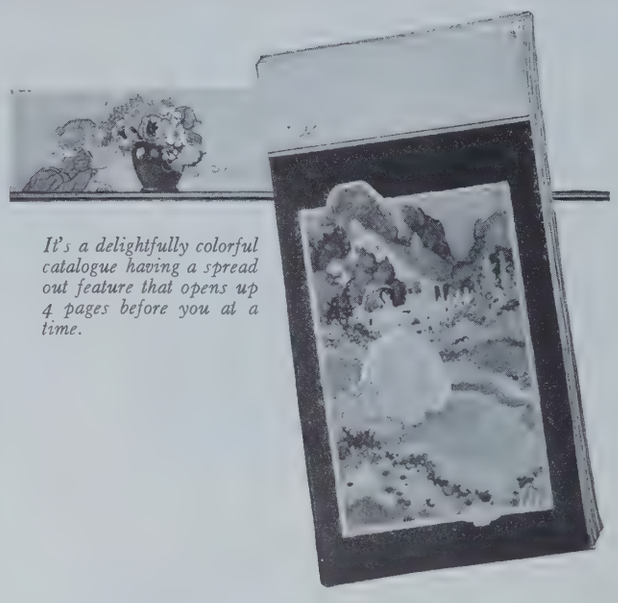


It's a delightfully colorful catalogue having a spread out feature that opens up 4 pages before you at a time.

Another Roehrs Catalogue Is Ready For You Send For It

Another one of those uniquely attractive, handily arranged, flower seed and hardy plant catalogues.

Another one with its original ten-ten grouping, making selecting and ordering so exceedingly simple.

Another one containing all the dependable old standbys in flower seeds, and a choice array of the old fashioned hardies, that are now so new fashioned.

Besides which it tells you all about the wonderful Shaker Shaker, that seeds your lawn and fertilizes your flowers.

Send for it early. Order early.
Insure yourself early deliveries.

The Shaker Shaker Costs But $1.00

Julius Roehrs Co
At The Sign of The Tree
Box 10, Rutherford N.J.

(Continued from page 412)

sprinkled on it from time to time, and thus the seed-bed will be kept moist.

Onions, too, can be started in the house now. White Victoria, Spanish King, and Prizetaker are recommended for this early sowing. The large globe Onion is the sort desired. Sow the seed in a flat and transplant the little Onions to the open ground as soon as the latter can be worked.

Now is a good time to start your Rhubarb moving. Give the plants a good dressing of well rotted manure or compost. If you want to force a few stalks, place bottomless kegs or boxes over them and heap some heating horse manure around the kegs and inside of them.

STRETCHING OUT THE SPRING

HOTBEDS should be made this month. Be sure to break up the manure well and tramp it solidly. Fresh horse manure is the best material to use. If leaves have been used for bedding, the addition of some of these will produce a more lasting heat, though it will be also more moderate.

EARLY SPROUTED POTATOES

ANOTHER bit of real gardening one can do is to start potatoes to sprouting. By doing this, you can mature potatoes weeks earlier than by planting unsprouted seed pieces. The long, spindling sprouts so often found on old potatoes kept in dark cellars are worthless, and the potato that has produced them is much weakened. Choose your good seed potatoes, cut them into the proper sizes for planting, and dip the cut surfaces in sulphur. Then place your seed in a single layer on trays or other containers where it is warm and where there is a strong light. But direct sun rays must not reach these seed pieces. A location close to a north window is excellent. Strong, sturdy, blue sprouts will soon begin to appear. If the seed pieces are set in sand in a flat, they will send out roots, as well. By the time one's garden is ready for planting, in March, there will be excellent little Potato plants ready to set out. These can be lifted and set down deep in the garden. Six inches is none too deep. Those who have not tried this method of hurrying the potato along will hardly believe how it shortens the time between planting and maturity of potatoes. The dusting with sulphur tends to prevent scab.

IS THE SEED ORDER OUT?

DON'T delay longer in ordering seed. The new seed catalogues are out by this time. Order early. It is the only sure way to get what you order. Late comers get inferior seeds and often cannot get their orders filled promptly. So consult your plan, made last month, and get your orders off to the seedsman.

SHRUBS OF QUALITY FOR THE ORDINARY GARDEN

SELECTION of shrubs to frame the little garden is a most important phase of starting a garden. They are permanent garden fixtures, gaining in beauty and effect with each year. We need greater variety in shrub planting to develop individuality in gardens so that one will not be a replica of its neighbor. There is no use adding monotony to the scenery by planting the ubiquitous Spiraea Van Houttei, fine shrub that it is, when you can see blocks of it by merely looking out the front door.

The Hydrangea is also over used, and Japanese Barberries sprout on almost every corner.

The new catalogues now arriving offer fascinating lists of new plants and shrubs. It is wisest to go slow on novelties until their value and hardiness is established but a few should be tried to add interest.

Here are a few shrubs of fairly recent introduction, seldom seen, and very much worth while. All have been grown by the writer, have proved absolutely hardy, withstanding a temperature of 22 below zero and numerous thaws and freezes, and have added greatly to the interest of the garden. They grow as readily as an old fashioned Lilac.

Sorbaria arborea glabrata—A name like a freight train attached to a very fine, fast growing mountain-ash-leaved Spirea that covers itself with great creamy white plumes from July till October, a late blooming shrub of which we have very few. Fine for a specimen or to fill a corner. It grows ten feet high in two or three seasons and makes a clump as thick through.

(Continued on page 416)

Your success with plantings

depends largely on the condition of trees, plants and shrubs when they come to you. The care with which Storrs & Harrison products are selected and prepared for shipment insures the best possible results. The roots of evergreens are balled in a special clinging soil which is to be transplanted with them, burlap and all. You are assured success by this method.

71st Annual Catalog

lists the choice of the great S. & H. nurseries which total 1200 acres. If you are planning a small kitchen garden or one of expansive acreage, a beautiful lawn or fruitful orchard, write for this free catalog. You can depend fully on the quality of every seed, tree, plant and shrub shown and described in it.

THE STORRS & HARRISON CO.

Nurserymen and Seedsmen for 71 years

ox 663 **Painesville, Ohio**

Especially Good News for Rose Lovers

NINE times out of ten, the reason some are so much more successful with roses than others, is simply because they have found out exactly the kind of diet a rose most needs.

They must have special Rose Food, not just ordinary garden fertilizer. That is why we secured the ideas of over 100 different rose experts in different parts of the country as to what a Rose Food should really be.

Then we made one that came the nearest possible to their ideas. So unfailing were the favorable results that we are now for the first, giving all rose lovers the chance to have it.

It is packed in 10 pound cartons, and 25 and 100 pound bags.
10 pounds costs $1.
25 pounds $2.
100 pounds $5.

One pound for each rose plant is enough for the entire season.

This Special Springfield Rose Food is sold by most seed stores and catalogue concerns. If your favorite one hasn't it, write us direct and we will gladly supply it.

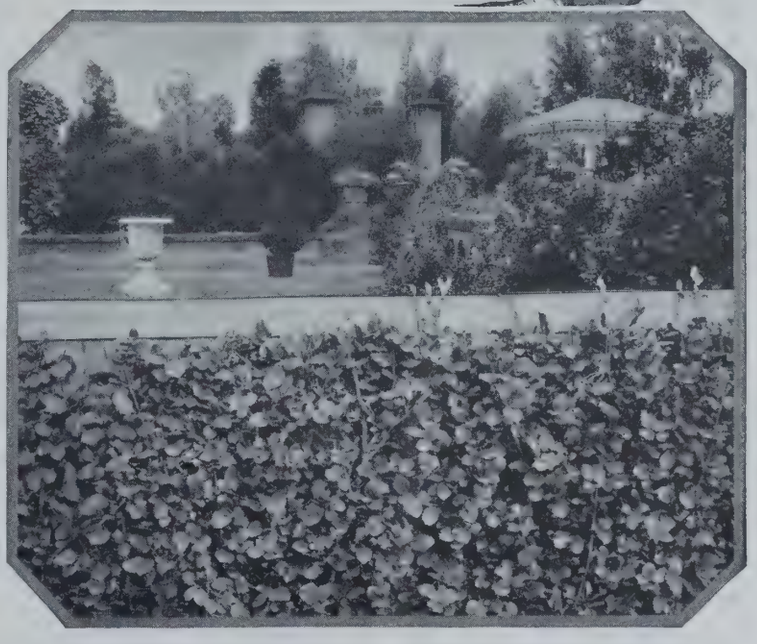
Write us for a circular about it.

American Chemical Specialties Co.
Box 28
SPRINGFIELD, NEW JERSEY

SPRINGFIELD PLANT FOODS

Evergreen Bittersweet
(*Euonymus radicans vegetus*)

"If I had a million dollars to spare, I should like to plant an Evergreen Bittersweet against every stone, brick and concrete wall in America. . . . It is hardly possible that the World holds any plant with greater power to transform a house into a home."
—WILHELM MILLER



The Million-Dollar Vine!

Special for 1925

HARDIER and better than Ivy—dense, glossy, evergreen foliage brightened by scarlet berries in winter—beautiful 365 days in the year—hardy on all soils and exposures—easy to grow, trailing over the ground or climbing twenty to thirty feet—slow to start but, once established, growing with steady vigor—covering any sort of wall, tree trunk or trellis.

Plant 3 feet apart along the side of the house; 1 to 2 feet apart for low walls, hedge or ground cover.

While they last—

Strong pot plants: 12 for $5.00
50 cts. each, 100 for $35.00
Small plants: 25 cts. each, 12 for $2.50, 100 for $18.00.

FREE—Elliott's Spring Book of Hardy Plants, Shrubs and Vines for fine gardens. Complete and full of helpful suggestions. Send for your copy now.

ELLIOTT NURSERY COMPANY

501 Magee Building **Pittsburgh, Pa.**

Bessie Boston Dahlias

Many New Varieties for 1925

—Including a Gold Medal Pink

Some of the Bessie Boston Prize Winning Dahlias are:

Ballet Girl	Koh-I-Noor
California Superba	La Mascotte
Champagne	Mariposa
Daddy Butler	M. H. De Young
Dreamlight	Papillon
Eliza Clark Bull	Rookwood
El Granada	San Mateo
Esther Hunt	Shudow's Lavender
Elsie Oliver	Talisman
Kittie Dunlap	Tommy Atkins

Bessie Boston Dahlias are known and grown all over the Dahlia World.

1925 Catalogue Ready

Bessie Boston Dahlia Farm

San Mateo, California

BETTY EASTERN STAR EMMA MARIE

Dahliadel Nurseries

The Home of Dahlias of Quality and Distinction
They are healthy Jersey Grown Dahlias
The most for your money. Satisfaction Guaranteed

Send for a copy of our 1925 catalogue which tells the true story of 30 acres of dahlias, and 13,000 square feet of floor space completely equipped for the growing, shipping, and storage of same.

See Emma Marie—Our new Pink Hybrid-Cactus without a rival—in natural colors. The catalogue cover has for a setting a field of this wonderful flower in colors.

Let us help you plan your garden now.

DAHLIADEL NURSERIES

Warren W. Maytratt **VINELAND, N. J.**

(*Continued from page 414*)

Philadelphus Virginal—A double white Mockorange, one of the finest (if not the finest) white flowering shrub we have. You don't know how fine a Syringa really can be until you see this one.

Cotoneaster divaricata (Pronounced ko-tony-aster, not cotton-easter as often heard). One of a numerous race of Rock-sprays or Quinceberries. Beautiful for its ruddy foliage dripping with scarlet berries in the fall. Its branches spread out in flat fronds. Easy to grow and always attractive. It doesn't like wet heavy soil.

Lonicera Maackii podocarpa—The fastest growing Bush-honeysuckle, makes amazingly quick growth, covered with white flowers followed by brilliant berries which bead the branches and last a long time. It carries its foliage till snow flies.

Rosa Hugonis,—Father Hugo's Rose, much advertised and deserving it. It has small feathery foliage, bright green and attractive at all seasons and in May the branches are studded their entire length with brilliant single yellow blooms. A handsome bush and of sturdy growth. It likes a well drained situation.

The California Garden in February

CONTINUE planting and pruning deciduous shrubs and trees; also prune Roses and make cuttings, as the dormant wood will root well and bloom early. If Roses do not look healthy, take up, examine and prune the roots and replant in fresh soil.

Cuttings may be made now of Hydrangeas, Fuchsias, Weigelas, Lilacs, Geraniums, Carnations, Heliotrope, and Petunias. Plant cuttings of the last two in a frame, or in boxes in a warm place; shade for ten days and then expose to light and air. Border plants and hardy perennials may be increased now by division of the roots.

Sweet-peas may be sown now as well as California Poppies, Lupins, Corn-flowers, Nemophilas and other hardy wild flowers. Also in boxes or in the open ground the following hardy annuals: Calliopsis, Cosmos, Salpiglossis, Zinnias, Asters and Petunias. The last four should be sown in boxes in a warm place and shaded until germination. When large enough, thin out and transplant to larger boxes or the open ground. The following perennials may also be sown in February: Hollyhock, Stock, Verbena, Pentstemon, Snapdragon, Wallflower; and the biennials, Foxglove and Canterbury-bell.

Keep the winter-blooming Iris cretensis (stylosa), and Iris reticulata cultivated and mulched, and well-watered in the absence of rain. The blossoms of the Iris cretensis should be picked when in bud, opening out in the warm air of the house. Protect from snails.

Continue planting Watsonias and Gladiolus, the latter at intervals. Protect the Cineraria where the nights are cold, by a light cotton covering, to insure early spring blooming.

Tuberous Begonias may be started now and increased by dividing the budding tubers. Sprinkle the cut surfaces with sulphur, dry, and plant in shaded boxes; they will bloom from June to November.

European Iris may still be set out, if not already planted. Do not plant the rhizomes too deep, and put old manure only on the surface of the ground. E. V.

"Uncivil" Engineering on the Little Lot

SOME English writer whose name now escapes me, speaking of gardens, said that the stability of a nation was shown by its gardens. If his statement is true, and it sounds reasonable enough, the U. S. A. is stabilizing at a rapid rate if there was anything lacking in this line. Back yards are bursting into orderly bloom in great numbers in the suburbs and outskirts of our cities each year. Others would do so if their owners knew just how to go about laying them out. The expense of hiring a landscape architect for a small plot often deters the owner. It is not necessary and it is easy to achieve very satisfyingly beautiful results without such expert aid.

The writer has no training whatever in landscape work save that of observation and the following notes are based on experience in helping friends lay out their small plots, the 50 ft. lot being the commonest unit, usually with a square planting space available. An oblong space is easier to handle and lends itself to better effects but there aren't nearly so many of them as of the square variety. The plans here outlined are such that anybody can lay them out very readily.

(*Continued on page 418*)

Win-Dor

"Inside the Screen"

Casement Window Operators

So much depends on how you open and close them

WITH the Win-dor, it's simplicity and ease itself.
No opening of screen.
No unhooking.
No working of a set screw.
No leaning out window.
Just an easy swing of a detachable handle inserted in an inconspicuous socket, and that's all there is to it.

Furthermore, it locks itself.

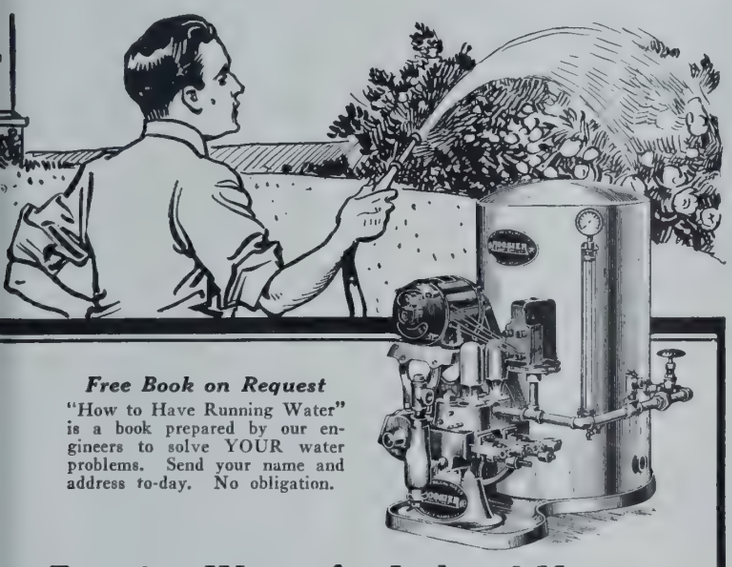
The same handle that does the opening and closing, does the locking and unlocking.

Can be put on old windows as easily as on new.

Send for booklet: "Things You Ought To Know About Casement Windows."

The Casement Hardware Co

251 Pelouse Bldg. Chicago, Ill.



Free Book on Request

"How to Have Running Water" is a book prepared by our engineers to solve YOUR water problems. Send your name and address to-day. No obligation.

Running Water for Isolated Homes

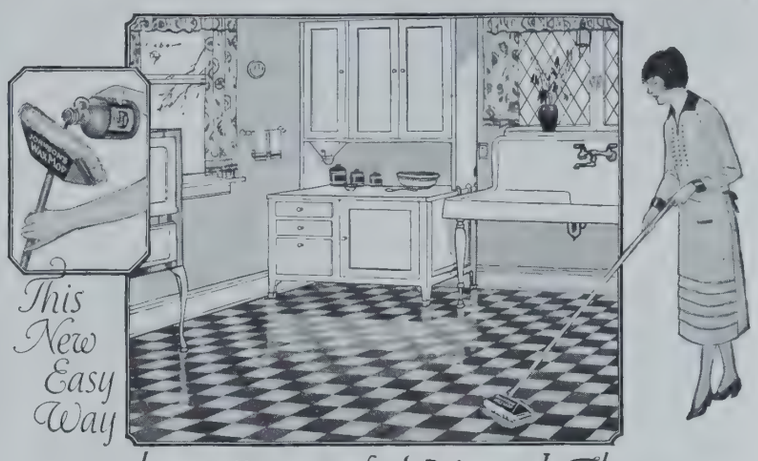
Suburban and isolated homes can now have water facilities equal to city service—at LESS than city cost.
Hoosier Water Service will provide water for the kitchen, bath, and laundry; for lawn, garden, stock, and fire protection. Pumps water from deep or shallow wells, lake, creek, spring, or cistern. Uses any kind of power. Can be installed in any building, new or old, without rebuilding or remodeling.
Electric installations are automatic. Unequalled for pumping cistern water for home use.

FLINT & WALLING MFG. COMPANY
43 OAK STREET KENDALLVILLE, INDIANA

GALVAZINK

REGISTERED TRADE MARK, U.S. PATENT OFFICE

JOHNSON'S LIQUID WAX



This New Easy Way

to have Beautiful Waxed Floors

"HOW do you keep your kitchen so spick and span? It always looks as though you'd just laid new linoleum."

"Why, this linoleum has been down six years. But the man who laid it waxed it for me with Johnson's Liquid Wax and he told me if I'd *keep* it waxed that it would stay like new. And wear years longer.

"No, it isn't any trouble at all since I bought one of those Johnson Floor Polishing Outfits. Every couple weeks I spread on a thin coat of Johnson's Liquid Wax with the Wax Mop. It only takes a few minutes—I don't touch my hands to the wax or the floor—I don't even stoop down! Just pour a little Liquid Wax onto the Mop and a few easy strokes give the floor a thin, even coating.

"Then I polish the wax with the Weighted Brush. In a few minutes my floor is beautifully polished—and it's no more trouble than running a carpet sweeper.

"Why yes, I wash my *kitchen* linoleum, of course. But it doesn't seem to need washing nearly as often. And then it's so easy—more like washing off a piece of glass than a floor.

"But I *never* wash the inlaid linoleum in my other rooms. I polish it a couple of times a year with Johnson's Liquid Wax and that gives such a hard, dry polish that dust stays right on the surface. I re-wax the doorways and traffic spots when they start to show wear—but that only takes a few minutes.

"All the wood floors in my house are waxed too. In fact, I couldn't keep house without Johnson's Liquid Wax! I use it to polish my furniture and woodwork—to clean white enamel—and on the car!"

$6.65 Floor Polishing Outfit $5.00

Your dealer is authorized to offer you this $6.65 outfit for only $5.00. It consists of:

1 Qt. Johnson's Liquid Wax	$1.40
1 Johnson's Wax Mop	1.50
1 Johnson's Weighted Brush	3.50
1 Johnson's Home Beautifying Book	.25
	$6.65

SERVICE DEPARTMENT
JOHNSON'S ARTISTIC WOOD FINISHES

Stores displaying this sign can furnish the Johnson Floor Polishing Outfit. They also carry a full line of Johnson's Artistic Wood Finishes.

Insist upon your dealer supplying you with the Johnson $6.65 Floor Polishing Outfit for $5.00—it means a saving of $1.65.

This offer is good at department, drug, grocery, hardware and paint stores. If your dealer cannot furnish the outfit—write us for the name of the nearest dealer who can. If you already have a mop—you can get the Weighted Brush, a quart of Johnson's Liquid Wax and the 25c Book for $3.50—a saving of $1.65. Or, any of these articles may be purchased separately.

Ask for a FREE copy of the Johnson Book on Home Beautifying at your best paint or hardware store. Or, mail us 10c to cover postage and wrapping.

S. C. JOHNSON & SON - Dept. G M-2 - RracINE, WISCONSIN
"The Wood Finishing Authorities" (Canadian Factory: Brantford)

"Best on Earth"
Gladioli
—far, far better than you have ever known
JOERG'S WHITE

THE sensational 1925 Novelty, is undoubtedly the greatest White Gladiolus ever produced. Many leading judges have even pronounced it

The Largest of All Gladioli

Three years in succession it has beaten all comers at the Great New York Gladiolus Show and received a special Trophy from Am. Glad. Soc. in 1924.

For size, form, and purity it stands supreme, whether in the garden or in competitive Exhibition.

For sale by all leading Seed Houses or direct from us.

Per Bulb $5.00

(*No smaller sizes or bulblets for sale*)

There are other startling novelties, and standard kinds of rare beauty described in our illustrated catalogue, mailed FREE upon request.

GEO. J. JOERG, Inc.
40 Years Growing Gladioli
Box G,
New Hyde Park Long Island, N. Y.

JOERG'S WHITE

DINGEE ROSES
On Own Roots
Our leading Rose "Charles Dingee"

AS PIQUANT bud or stately full-blown flower, the "Charles Dingee" rose is exquisitely lovely. Velvety petals shade from a warm rose color to the creamy tints of ivory. Long, erect stems bear lightly enormous blossoms. The crisp glossiness of the leaves, and long, slender calyx enhance the delicate charm of the flower.

This rose, honored with the name of the founder of our business, was produced in our own gardens by crossing a hardy pink rose with one of the best of the white varieties. The resulting bush is of unsurpassed strength and beauty. It grows in any soil and blooms continuously.

We own and control the entire stock of "Charles Dingee" roses. They can be had nowhere else. It deserves a place in any garden or yard. One-year-old plants, 30c; 4 for $1.00. Large 2-year-old plants, 85c, by parcel post, prepaid. Extra strong 3-year-old bushes with soil on roots, $1.25, by express, charges collect.

Our New Guide to Rose Culture for 1925 Sent Free on Request

Illustrates wonderful "Dingee Roses" in natural colors. It's the lifetime experience of the *Oldest and Leading Rose Growers in America.* Offers over 500 varieties of roses and other plants, bulbs and seeds, and tells how to grow them. Edition limited. It's Free!

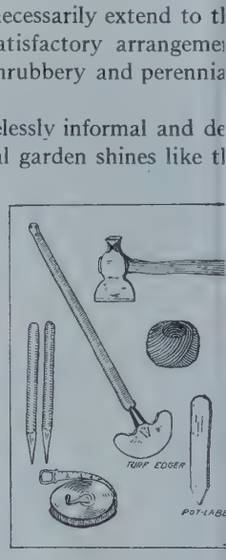
Established 1850 **70 Greenhouses**

The DINGEE & CONARD CO.
Box 237 **West Grove, Pa.**

(*Continued from page 416*)

So far as general principles go, the small backyard lends itself be to a little formal garden. Naturalistic planting, so called, is out place so definite and limited are the boundaries. The formality co sists of the ground plan chiefly. It need not necessarily extend to th planting for it seems to me that the most satisfactory arrangeme for a small garden is an informal border of shrubbery and perennia with formal inner beds.

The majority of city backyards are so hopelessly informal and de perately chaotic at times that the little formal garden shines like th proverbial good deed in this criminal world and one established in a block leads rapidly to others, often shaming adjoining owners into cleaning up.



The handy half-dozen whe you're laying out your ga den: edger, hatchet, measu ing reel, stakes, twine, an label

Perhaps the first sense necessary in laying out a garden is a sense of proportion. In fact this is the chief reason for laying it out at all. Few of us possess this sense naturally. Some people have such refined sense of color, tone, proportion or something else that they are nuisances to themselves—they are forced to suffer so severely and likewise afflict others—but few of us are so burdened. We can, however, attain proportion and symmetry by simple geometrical figures that require only a little "uncivil" engineering, as some of my friends term my efforts, and a neat little formal garden is laid out and ready to plant. The most ignorant and unskilled gardener can do this work and then can hav the fun of experimenting for a year or two until his taste in plan develops sufficiently to choose what he best likes.

The "props" for this uncivil engineering are simple and inexpensiv a ball of stout twine that will stand stretching tight; a turf edger pri about $1.10; a bundle of 4 inch pot labels which retail at $1.85 p thousand—you will need them anyhow; a 75 ft. measuring tape, pri around 75 cents; a hatchet or hammer, and a supply of stout stake

With this outfit the plans illustrated can be laid out in the course an hour with two people, one at each end of the string or tape. In fac they have been, so this is not theory.

The first step is to find the center of the lot or to be more exact, the planting space, usually limited by the hard, uncompromising li of a cement walk, as inevitable as death and taxes in suburbia. Dra strings diagonally from corner to corner of the space to be used. Whe the diagonals cross is the center. Drive a stout stake firmly at th point and you have the base of operations established. Next mark th center of the boundaries by the measuring tape or if one isn't hand by doubling the string stretched from corner to corner. These w

TWO WAYS OF LAYING OUT A 50 x 50 FT. GARDEN PLOT

1 A circular design (above left) with inner bed, or pool, 8 ft. in diameter; each bed 4 ft. wide; paths 3 ft. wide; outer diameter 50 ft. and radius 25 ft. 2 The rectangle as a basis; (upper right); inner pool, or bed, 8 ft. square; each flower bed 4 ft. wide; outer dimension 50 x 50.

serve to locate paths. You are now ready to outline the beds illu trated.

The little suburban garden most easy to lay out is either a circul or rectangular basic design. The circular base is a popular one becau beds laid out on circular lines give a surprising air of spaciousness to small area. The disadvantage of the circular plan is that the b need permanent edging of brick, stone, concrete, or board strips to mai

(*Continued on page 420*)

Dwarf Fruit Trees---
Best for the Home Garden

Require Half the Space of Ordinary Trees

Make your fruit garden dreams come true by planting dwarf fruit trees. They are the best for the home garden because they are easy to plant—easy to care for—easier to pick the fruit—bear in about half the time of ordinary fruit trees—need less room and never get too big—bear delicious tasting fruits that will supply the family needs.

Dwarf Apple Tree
Scarlet Beauty

Our customers send in pictures of these trees because they are pleased.

Plant Van Dusen Dwarf Trees this Spring.

We Specialize in

Dwarf Apple Trees
Dwarf Pear Trees
Dwarf Plum Trees
Dwarf Cherry Trees
Dwarf Peach Trees

Send postal for our FREE catalogue describing complete line of trees, ornamentals, shrubs, vines, etc.

THE VAN DUSEN NURSERIES
C. C. McKay, *Mgr.*, Box G, Geneva, N. Y.

Read this letter from an enthusiastic customer

Van Dusen Nurseries,
Geneva, N. Y.

Gentlemen:

I received the three dwarf Scarlet Beauty apple trees and planted them April 25th. Pretty soon they bloomed and now they have all set apples. I am so pleased with them I thought I would tell you about their fruiting the first year. Everyone who sees them says they never saw anything like them. I will want more this fall.

Yours truly,
Tennessee S. T.
June 2, 1924

WAGNER FLOWERS

PLAN to make your grounds more beautiful this spring by planting Wagner hardy flowers, roses, shrubbery, evergreens, and ornamental trees.

Wagner stock has long been favored by flower lovers because of its vigor and full blooming qualities.

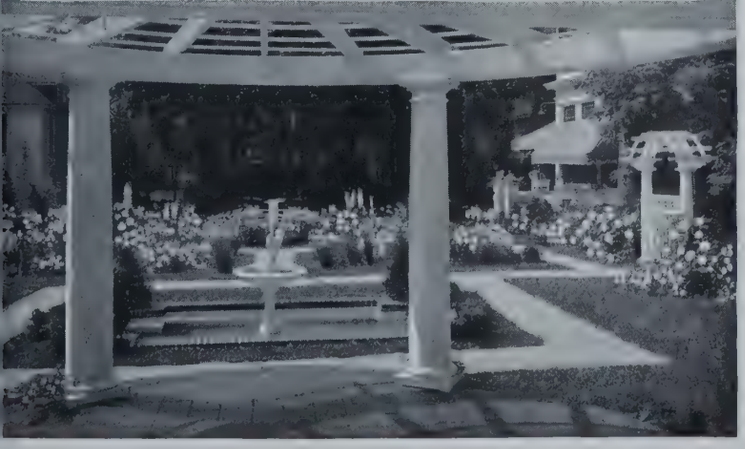
To make your grounds more harmonious, there is available Wagner Landscape Gardening Service. The broad principles of this service are to create a garden of originality and loveliness. Whether you have a modest suburban lot or an extensive estate, our garden experts can aid you. Plans submitted by mail or by a landscape expert.

You'll find much of interest and value in our new catalogue. It tells of Wagner flowers and the Wagner Landscape Garden Service. There is a copy for you if you will write. *Please ask for No. 383.*

Wagner Park Nurseries Box 83 Sidney, Ohio

Nurserymen—Florists—Landscape Gardeners

This garden designed and planted by Wagner Landscape Service



MICHELL'S
"Long Season" Collection of Annuals for Cutting

A CAREFULLY selected group of those popular annuals which provide greatest color variety in cut flowers from early summer till frost comes.

Improved Giant Mixed Snapdragons
Bloom freely July till frost. See illustration.

Michell's Improved Semple's Branching Asters

Calendulas Rich deep orange variety, ORANGE KING
Large double flowers in continuous profusion.

Giant White Candytuft
Many immense spikes of large flowers on each plant.

Mixed Marguerite Carnations
Finest of annual pinks; large, fragrant flowers borne continuously.

Double Blue Corn Flower
An old favorite long season annual, very popular for cutting.

Early Blooming Mixed Cosmos
Large flowers from July till frost.

Single Mixed Gaillardia
Finest development of the favorite blanket flower. Blooms early summer till frost.

Baby's Breath Large Flowering
Delicate sprays of pure white flowers improve any bouquet.

Tall Double Stock Flowered Larkspur
Slender spikes of double rosette flowers, amid fern-like foliage. July on.

Giant Flowering Nasturtium
Unsurpassed for brilliancy of color, and large size of flowers, on tall or dwarf plants.

Scabiosa Grandiflora Mixed
Bears freely throughout summer and autumn large double flowers, excellent for cutting.

Strawflower Most popular everlasting. Mixed
Cut in summer, last all winter.

GIANT FLOWERING SPENCER MIXED Sweet Peas
Exquisite in color and shades; long stems.

Giant Flowering Mixed Zinnias
Every shade of color found in Zinnias. Largest blooms.

Any of the above at per packet 10c

Special Offer to Garden Magazine & Home Builder Readers who mention this advertisement. 1 packet each, total value $1.50 for..... **$1.00**

NOW IS THE TIME TO GET YOUR GRASS SEED

and have it ready when the time comes to put your lawn in shape to withstand summer droughts. Put your lawn problems up to us—30 years specializing has enabled us to perfect a grass mixture for every lawn, pleasure ground or field condition.

MICHELL'S 1925 CATALOG FREE ON REQUEST

HENRY F. MICHELL CO.
520 Market St., Philadelphia, Pa.

Our Special Spring Offers

give the opportunity to plant high grade plants at the lowest cost. Only first class stock is included in these offers. The volume of orders in economical units of sale permit us to make the prices so low.

No. 1—The Favored Dozen Climbing Roses - - - - - - - - 12 for $6.00

This collection includes one each of the 12 most popular climbers as chosen by the members of the American Rose Society. Transportation prepaid east of the Mississippi River.

No. 2—The Three Fifteen Collection, 15 Everblooming Roses for - - - $10.00

This collection includes 5 each of 3 varieties in your choice of 3 of the 4 colors, red, white, yellow or pink. We select the varieties from first class bushes, one variety for Garden Bloom, one for Cut Flowers and one for Boutonnieres. Transportation prepaid east of the Mississippi River.

No. 3—The "Little Evergreen" Collection, 6 Evergreens for - - - - - - $5.00

This collection is made up of 3 Norway Spruce 18-24" high, 3 Arbor Vitae 18-24" high, each plant is shipped in a ball of dirt, wrapped in burlap so they will live. Transportation at Customer's Expense.

No. 4—The Ideal Foundation Planting, 20 Evergreens, 14 Shrubs - - - $50.00

If purchased individually these plants would cost in total $62.50. This planting has been selected for adaptation to any modern house and the plants vary in size from 12" to 4' in height. Included are Junipers, Cypress, Arborvitae, Blue Spruce, Norway Spruce and Dwarf Chinese Arborvitae, all with Ball and Burlapped, plus 12 Barberry and 2 Climbing Roses. Transportation by freight prepaid within 50 miles of New Brunswick or freight allowed on Express shipment (Weight about 300 lbs).

All these collections have been giving satisfaction to our customers for several years, for they tell us that the quality of the plants are really above their expectations.

Order early to avoid disappointment. Shipments made at proper time for planting in your locality.

NEW BRUNSWICK NURSERIES

New Brunswick, N. J. Fred. D. Osman, Prop.

(Continued from page 418)

tain the outline which grass paths are likely to overrun. If the central stake is driven down even with the sod and maintained, it is not so difficult to relocate the outlines but the growing plants will be in the way. If the central feature of the garden is a little pool, it is more difficult because there is no way of centering to re-draw the lines.

The rectangular plan is easier to handle and keep in shape because it is a simple matter to drive stakes at the corners of the beds flush with the sod and leave them, by which lines can be stretched to cut the sod when it needs it. The rectangular plan does not convey the same idea of spaciousness as the circular. It looks compact, and it is compact. The beds "around the corner" are used in the accompanying design because this style removes the spotty effect of small four cornered beds and gives a more spacious appearance than beds of rectangular shape.

In these plans the paths are three feet wide and the beds four feet. Wider beds give better effect but four feet is an ideal width for the small home gardener because it is the width which a woman can weed conveniently without stretching, and reach all parts of it. And, the home weeding of the flower garden falls to the distaff in a majority of cases.

To lay out the circular design, measure the width of beds and paths four and three feet respectively on the diagonals. Loop a cord around the central stake with a pointed stake tied in it at the distances marked *a* and draw it, stretched tight about the stake, until the various circles are completed. Stick the plant labels in the ground the width of the blade of the turf edger apart, the wide side parallel to the line, as the drawing of the circle proceeds.

It is impossible to mark a circular line with a string and these miniature tombstones outline the circle perfectly. It is then a simple matter to sink the edger, turn up the turf or soil and the bed is outlined ready for the spade. The use of these little labels also obviates the necessity of strings stretched here and there in laying out the garden. My footwork is fair but I never yet failed to stub my toe over strings when I had any number of them about, jerk up stakes, and be obliged to relocate and lose time. By using these labels outlines are perfectly apparent, the general effect of the plan is readily observable, and there is nothing to kick over that can't be readily adjusted.

Next, measure a foot and a half on either side of the central marks on the sides of the garden and stretch the strings across, marking with the pot labels. Pull out the labels that fall in segments of the circles included in the paths and your garden is outlined with the labels and is ready to be dug. You can see just what it looks like, particularly if you look down upon it from a second story window.

Suggestion for the small gardened lot when broken by a central walk, softening edges and margins by appropriate planting with shrubs and small trees at accent points, (see accompanying text)

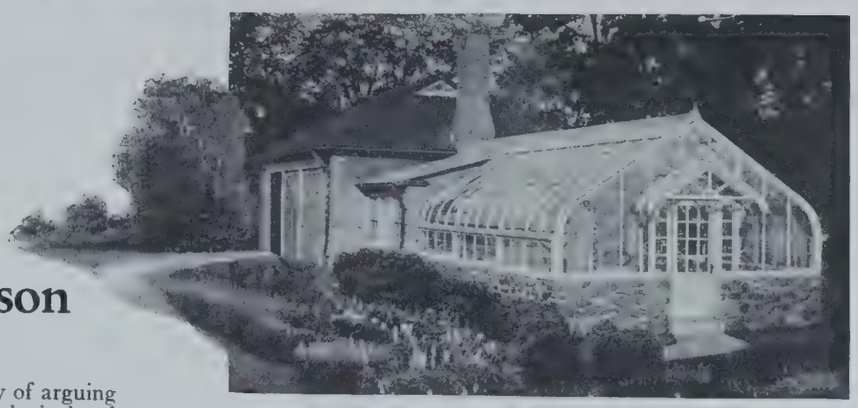
The outlines of the rectangular plans are located by pot labelling lines three and four feet apart both ways of the garden and pulling the labels where they fall in the path. This operation will be apparent when a few of the lines are staked out with the labels and is much easier to see than to explain. It is, as before noted, a good plan to drive a stout stake deep into the ground at the corner of each bed to be used in edging when necessary.

These two plans may be considered as sectional. As a starter, only the outer bed may be outlined and planted leaving the center an open lawn space, adding the inner series of beds as growing acquaintance and interest in plants and desire for more space requires. The central feature may be a pool, a bed, a bird bath or a sun-dial. In these gardens as planted, the owner planted the central beds to Zinnias one year and French Marigolds another, the outer series of beds being devoted to informal plantings of perennials, bulbs, and annuals. The Zinnias and Marigolds followed Darwin Tulips.

One of the most difficult backyard problems arises when the yard is split exactly in half by a cement walk, not an infrequent circumstance. In this case the walk may be taken "as is" and included as a cross path or, a scheme which seems to me more satisfactory, plan a four foot border on each side of the walk with occasional stepping

(Continued on page 422)

Hitchings Sunshine Shops



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That's Another Reason

ISN'T it so, that some things have a way of arguing for themselves? They are so downright logical and consistent, that they sit right on your shoulder and make you listen.

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is the title of our Catalogue No 114 for which please write. It attempts to convey to you the extent of our plant resources. We are willing to do any amount of work to win new customers and make them friends. On that basis we invite your inquiry, or your order for plants of fruits or flowers. Please let us hear from you.

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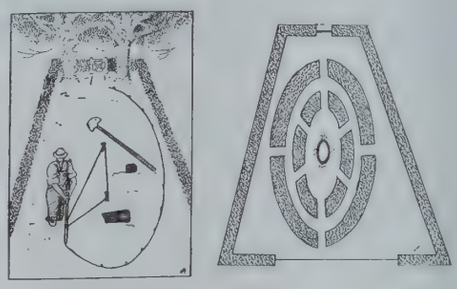
(Continued from page 420)

stones to permit entrance to the panels on either side which may be planted to grass with a border around the entire yard. The plants should be placed close to the walk so that they will extend over it and break up its hard outlines. When a cement walk is used as one of the cross paths, the design about it seems only to emphasize its unyielding lines. Very pretty effects may be secured by these borders along walks.

When a square planting space is available, there is usually at least a foot or two of space between the cement walk and the fence which should be planted with annuals or perennials to sprawl out over the walk.

In many of our suburbs of comparatively modern origin there are diagonal streets or curving drives which result in lots of odd shapes and trapezoidal back yards which are hard to make look like anything when it comes to laying out a garden. The simplest way in which to pull



Engineering the oval plot is a comparatively simple process if one remembers that an ellipse is a circle with two "centers" and as easily drawn and laid out as a circle

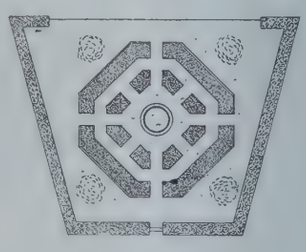
such an odd shaped plot into regular form is by the use of the oval or elliptical garden. An octagonal garden may serve the same purpose but it is more difficult to lay out. The oval garden has the same disadvantage as the circular in maintaining lines from the encroachment of sod unless given permanent edgings.

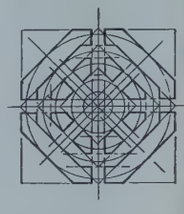
Drawing a perfect and symmetrical oval stumps the average citizen. To use an Irish bull in definition, it is a circle with two centers and as easily drawn and laid out as a circle. Centering one of these odd shaped pieces of land is something of a guess usually best solved by drawing a line from the center of the parallel sides, if there are any, and if not, by laying diagonals.

The two centers or more properly speaking, foci, of the ellipse may be placed on either side and equidistant from the center, the long way of the plot. The string is looped about both foci at the same time precisely as about the central stake in drawing a circle and stretched tight and the line drawn about the two "centers." The extent of the ellipse can be judged by shortening or lengthening the string doubled about the two stakes and also by increasing or decreasing the distance between the foci. The closer the foci, the fatter the ellipse.

The octagonal garden is laid out with a circle as a basis with a diameter as wide as the available space for planting drawn as before about a central stake. With the circle outlined, draw a square about it, each side equal to the diameter to the circle. Each side of the square

The octagonal garden requires more time and thought but the result amply compensates. Details of this type of layout described in the text





will be tangent to the circle. For convenience sake, the diameter of the circle should be a multiple of 3 in feet, such as 51 or 48 ft. Divide each side of the square into three parts which would be either 17 or 16 feet. Draw lines across the corners of the square from these third division points and the octagon is outlined. Then measure upon the radius of the circle, the three and four foot distances of the beds and paths and peg them out with the pot labels, drawing the cross paths from the center of each side of the outer square in the same manner as in laying out the circular and rectangular gardens.

The octagonal garden requires more time and trouble but gives a very pretty effect and it can be edged up into a short sided, blunt cornered lot and draw it into an appearance of regularity in the same manner as the ellipse.

SHERMAN R. DUFFY.

Stacks

SMALL COLONIAL HOMES — PICTURES AND PLANS

GARDEN MAGAZINE & HOME BUILDER

February, 1925

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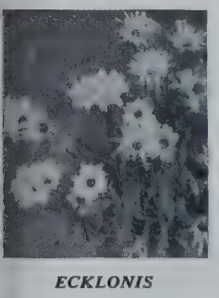
Newest and loveliest of the giant New American Snapdragons — Marvelous color and rivals the gladiolus in height and vigor. Grown successfully from the Yukon to the Gulf! See offer B.



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The new African Daisy—Dimorphotheca Ecklonis — large star shaped flowers with dark blue centers borne on long stems. Very successful in vase or border. See offer C.

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Seeds whose remarkable quality is not due to chance, but is the result of the painstaking, scientific care with which they have been produced by Master Gardeners for Flower Specialists. *Absolutely dependable* because of the vitality bred into them—Here is a pageful of delightful surprises and there are many more in our new "*Book for Garden Lovers.*"—free with first order, or 25c the copy.

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Schling's New Viscaria Loyalty. Covered with flowers resembling in miniature a wild rose of a rich cornflower blue.	.35
Schling's Original Blue Lace Flower. Queen Anne's Blue Lace. Flowers of an exquisite blue, long stems	.50
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Exquisite. Tyrian Rose.
Crimson Monarch. Best red, immense size
Giant Attraction. Brick Red (Spectrum red)
Scarlet Flame. Beautiful bright red blended with orange.
Meteor. Glowing deep red (Spinal Red)
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Will supply your table throughout the summer

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The Delicious Italian Sprouting Broccoli. A new vegetable for American Gardens, now served in the better hotels. Has the combined flavor of Asparagus and Cauliflower	.25
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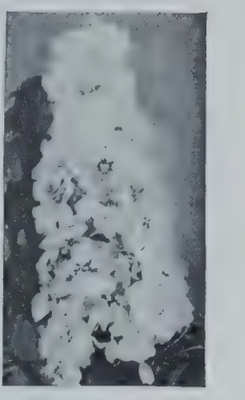

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The Flame-colored Azalea

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1 to 1½ foot clumps, each $2.50; 10 for $18.00
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2 to 2½ foot clumps, each $3.60; 10 for $33.00

We have the largest stock of nursery-grown specimen plants of this as well as of a score of other native flowering shrubs and shall be glad to make quantity quotations to landscape architects and other large users.

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Around every garden home is an odd spot that constitutes a problem. Somehow you don't know what to plant there. It may look too wet or too dry, too shady or too hot and sunny. For just such spots the remedy spells FERNS. Here are two selections for a wide variety of uses and situations.

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10 plants each of three varieties and 5 plants each of 1 variety, all named, 35 strong clumps in all, for **$5**

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5 plants each of nine distinct, shade-loving ferns of different types, 45 strong clumps in all, for **$6**

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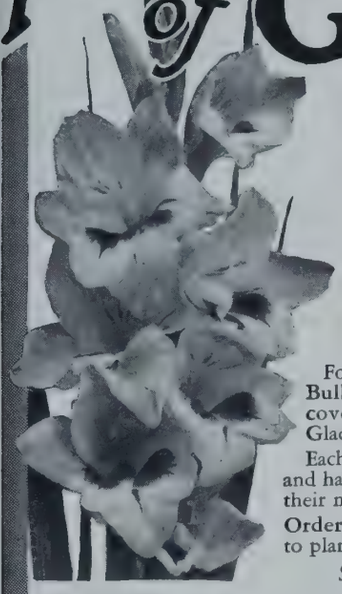
A Garden Full of Gladioli for $2.00



The Gladiolus is one of the most satisfactory flowers grown and there is no reason why every family cannot enjoy this grand flower—it is as easy to grow as the potato.

Bloom from July to frost if you plant a few each month from April to July.

For TWO DOLLARS we will send 50 Bulbs of our Grand Prize Mixture, which covers every conceivable shade in the Gladiolus kingdom.

Each year we sell thousands of these bulbs and have received numerous testimonials as to their merits.

Order Your Bulbs Now so as to have them to plant when you begin making your garden.

Simple cultural directions in package

Mail this advertisement, or present at our store, with Check, Money Order, Cash or Stamps, and secure this splendid collection, sent prepaid to any point in the U. S. east of the Mississippi. For points West and Canada add 25c—($2.25)

Our 1925 Spring Seed Annual sent on request

Stumpp & Walter Co

30-32 Barclay St., G. New York City

You Might Just as well Grow the Best

Primarily we are known to you as bulb growers and well do we appreciate the abundant confidence bestowed upon us by readers of this paper. But as bulb specialists we are not immune to hobbies, and our big hobby (outside of our business) is a fine strain of *Delphiniums*. Because of the extraordinary size of its individual florets we call this our

Silver Dollar Strain of Delphiniums

The individual flowers disposed around the main stalk are of various shades of blue (they are hybrids), they vary from single through semi-double to very double and are always as big across as a Silver Dollar—hence the name. The thrifty plants bear an abundance of stalks 2 to 3 feet tall, causing the plants to stand 5 to 6 feet high, under favorable culture. The seeds come from our Nursery in Holland where blight is unknown, so they start in your garden with a blight proof record. And seeds come to you with this

Unique Guarantee

The seeds *will grow!* We guarantee you 100 plants from packet supplied or we'll supply another packet *free!* We also guarantee seeds to produce the strongest kinds of plants Full culture directions with each packet

***Price, Seeds:*—$2.00 per packet. *Plants* (for spring delivery), $1.00 each, $10.00 per dozen**

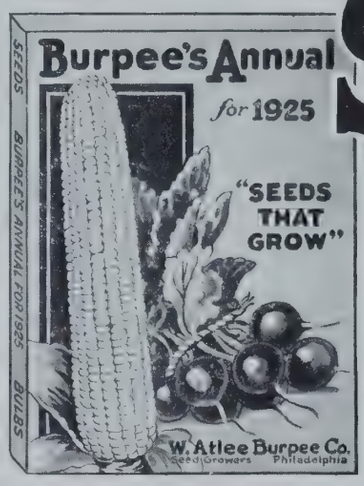
If you "go in" for competition in your garden club, make it *real* competition with the Silver Dollar Strain!

Catalogue of the choicest in Tulips, Daffodils and other Dutch Bulbs will be published during April, when it will gladly be mailed free on request.

ZANDBERGEN BROS., *"Tulipdom"*

Oyster Bay Long Island, N. Y.

Burpee's Seeds Grow



BURPEE'S ANNUAL
The Leading American Seed Catalog

THIS is the catalog that tells the plain truth about The Best Seeds That Grow. It describes the Burpee Quality Seeds.

Market growers and florists use BURPEE'S ANNUAL as a reference book, and still it is so interesting and easy to read that a million amateurs use it as their garden guide. BURPEE'S ANNUAL is the world's most popular seed catalog.

Every variety of seed offered in BURPEE'S ANNUAL is grown on the Burpee Farms, or by our experienced growers in other parts of the world. All seed sold by Burpee is tested twice at the Fordhook Trail Grounds. Burpee's Seeds are both Tested and Guaranteed.

If you are interested in gardening, BURPEE'S ANNUAL will be mailed to you free. Write for your copy today. We want you to sow Burpee's Seeds—The Best Seeds That Grow.

What Others Think of Burpee's Seeds

"Wife and I started out way back in 1883 or thereabouts sending our first order for a small amount. Each year the whole family looks for Burpee's catalog. We discarded all other seeds years ago."
C. A. Stevens, Asquith, Sask., Can.

"For more than twenty years Burpee's Seeds have stood the test. They have delivered in quality and quantity all I could ask of them. A good garden, plus a good wife has meant the difference between failure and success to me."
Jason Billings, Ripton, Vt.

"It has been my experience that produce from Burpee's Seeds always finds a ready market at top prices. But the source of greatest profit and satisfaction to me has been the fact that our little garden patch has enabled us to cut our grocery bill to less than half and yet throughout the year we live like kings."
Neal R. Van Loon, University Park, Iowa.

"I learned from my mother the quality of Burpee's Seeds and for nearly forty years I have used them with satisfaction and success."
J.W. Fager, New Orleans, La.

FREE SAMPLE. First write for a free copy of BURPEE'S ANNUAL; then look through the book and select a regular 10c packet of any vegetable or flower seed entirely free, and we will mail it to you postpaid. *This free offer is made to get new customers for Burpee's Seeds and is good until May 1, 1925.*

TEAR HERE

W. Atlee Burpee Co. SEED GROWERS PHILADELPHIA

Send me a copy of **Burpee's Annual** with Order Sheet good for a free 10c packet of Burpee's Seeds. B-15

NAME _____

R.D. or ST. _____

POST OFFICE _____

STATE _____

Like Baby 'Glads'—Only Prettier!

Except to "regular" garden fans, the name *Montbretia* means little. And yet, in the wide realm of flowers from bulbs, few surpass in graceful beauty, in the border or as cut flowers, these lovely, yellow copper colored fall flowers.

Most charming effects are created by scattering clumps of a dozen bulbs through the hardy border. The bulbs should be set quite close together—3 to 4 inches apart and 4 to 5 inches deep. Planted when Gladioli are set out, they bloom profusely for weeks. The gracefully arching branches support lovely bell-shaped flowers in hues that are a delight to the eye.

We are large growers of *Montbretias* and offer the following choice named varieties:—

Crocosmaeflora. Pure yellow, reverse of petals orange.
King Edmund. Rich yellow with a carmine-blotched center.
Lord Nelson. Flowers of great substance of a rich deep orange, outside vermilion.
Prometheus. Large, rich orange marked with deep red at center.
Rheingold. A beautiful clear golden yellow; large spike and very vigorous grower.
Speciosa. Richest of all in color; flowers large of intense scarlet shade.

Any of above $1.50 per dozen, $10.00 per 100

SPECIAL OFFER:—One dozen each of above six leading sorts will be mailed postpaid for $7.50.

The Finest Catalog Ever Published of Greatest Stocks of Worth-while Hardy Plants *Free*

Ten thousand *Garden Magazine & Home Builder* readers are already our customers. We desire to serve ten thousand *more* and can do it *right!* Will you be among them? We hope so and advance the promise to serve you better than you have ever been served before in your purchases of Hardy Plants.

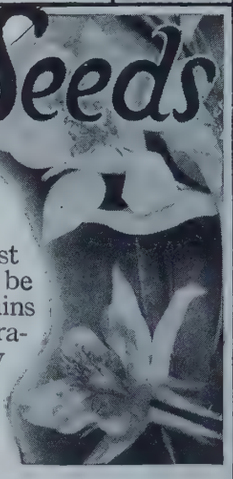
The Wayside Gardens Co.

Largest Growers of Hardy Plants in America

Mentor. Ohio.

E. H. Schultz, Pres. J. J. Grullemans, Sec. Treas.

Childs Seeds



50th Anniversary

Our 1925 catalogue is the finest we have ever published. It will be sent free upon request. Contains 140 pages, thousands of illustrations and descriptions, twenty full pages in colors. Many new novelties and attractive offers. Send for copy to-day. A post card will bring it.

A Few New and Rare Specialties from our 1925 catalogue

	Packet
54700—Petunia Sensation Rich Purple	50c
50440—Aster Heart of France	35c
56555—Sweet William Everblooming	25c
55100—Santa Barbara Poppy	15c
54410—Pansy Special Strain	35c
52180—Delphinium Private Estate Hybrids	50c
56830—Zinnias Dahlia Flowered Mixed	25c
51854—Cosmos Giant Early Double Mixed	25c
51540—Childs Chinese Woolflower	15c

SPECIAL OFFER (No. 50) **for $2.00**

We will send one packet of each of the above specialties for $2.00. If purchased separately would cost $2.75.

JOHN LEWIS CHILDS SEED CO., Inc.
FLORAL PARK, N. Y.

S. & H. Cotoneaster Horizontalis

A beautiful dwarf shrub for rockeries, border fronts, and lawn planting. 4-inch pot plants, 2 years old, $1.00 each—$9.00 for ten.

World's finest shrubs, plants, trees

STORRS & HARRISON varieties are the finest the world affords. They are selected and shipped as carefully as they are grown. The Cotoneaster Horizontalis featured above is best when obtained from pot-grown stock. It is one of the few evergreen foliaged shrubs producing red berries. It grows 3 to 4 feet high in a few years, but may be kept trimmed to the size desired. Order Horizontalis today, our stock is limited, and ask for the

Storrs & Harrison 1925 *Free Catalog*

1200 luxurious acres and 71 years of experience help to make this catalog one worth having. Consult it for seeds also. Get it before you place your spring orders.

THE STORRS & HARRISON CO.

Nurserymen and Seedsmen for 71 years

Box 629 **Painesville, Ohio**

Your first opportunity to secure the Lacinatus

AT LAST you may secure a limited number of bulbs of the famous Lacinatus—the only real fringed Gladiolus yet available to the public. The supply is not large, so those who wish to order Lacinatus should order *now*—delay may mean disappointment. To know more about this exclusive Kunderd origination, as well as to become acquainted with the finest and most beautiful gladioli, write today for the new

1925 *Kunderd Catalog*

Just off the press. Lists and describes hundreds of choice gladioli. Many illustrated—a number in full color. This catalog is a gladiolus text-book—revised and up to date. Contains my full cultural instructions which every gladioli lover should have. Write today for the catalog and *remember*—order early.

A. E. KUNDERD
Box G-B Goshen, Ind., U. S. A.
The Originator of the Ruffled and the Laciniated Gladioli

Kunderd Gladioli

THEY STAND SUPREME

Evergreens Are the Life of the Landscape

EVERGREENS smile the year 'round. They are the life of the landscape in winter and the spice of it in summer. The beauty and usefulness of

Hicks' "Time-Saving" Evergreens

is continuous. If used as a screen, they screen all the year; they give privacy all the time. As a windbreak they restrict the wind as completely in winter as in summer. Hicks' "Time-Saving" Evergreens are ready to plant now. Winter planting is as successful as in spring and fall. May we send you more information about them? You'll be interested.

HICKS NURSERIES
Box M, Westbury, L. I. New York

Cut Flowers to Your Heart's Content!

EVEN the small garden can be made to yield an abundance of flowers throughout summer and fall, by a judicious selection of easily grown Annuals. The Dreer Garden Book offers the greatest choice of flowers worth growing, but for those willing to accept our help we suggest the following selections. At small expense this will give you truly a

Season's Supply of Flowers

Easily Grown from Seeds

Superb Branching Asters, a packet each of 8 beautiful colors..... 60c

Giant Snapdragons, a packet each of six wonderful and distinct colors..... 50c

Double Calendulas or **Pot Marigolds,** a packet each of 6 choice sorts..... 25c

Double-flowering Cornflowers, a packet each of six colors of this splendid improved type..... 40c

Extra Early Colossal Cosmos, a packet each of 3 colors, White, Pink, and Crimson..... 25c

Stock-Flowered Larkspur, a packet each of 6 beautiful colors..... 50c

Special Strain of Giant Double Zinnias, a packet each of 7 of the most wanted colors..... 75c

Special Offer:—A complete set of the above 7 collections of popular flowers, 42 packets in all, of the choicest seeds procurable, mailed postpaid for $3.00.

Dreer's Garden Book

Abounds with hundreds of similar favorable offers in Seeds, Bulbs, and Plants for garden and home. For 87 years this printed representative of ours has been looked upon as a trustworthy friend by thousands who feel that our service and merchandise are essential to their garden success. The Dreer Garden Book requests the privilege of being of service to you. Free, of course, and please mention this publication.

HENRY A. DREER
1306 Spring Garden St. Philadelphia, Pa.

Greatest Garden Tool Value

Ever Offered!

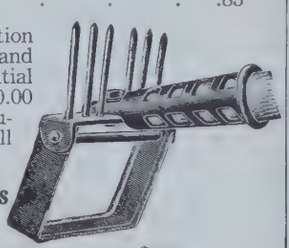
Greater gardens call for greater tools and we honestly believe the Gilson Combination No. 2, pictured below, to be the greatest wheel outfit plus the greatest tool value perfected so far. A sturdy wheel frame, 6 separate attachments for different uses, the handy "slip-on" connection making possible a quick change from one tool to another with a simple twist of the wrist—this briefly tells the story of this amazingly handy outfit.

Here's What You Get:

	Regular Retail Price
1 No. 2 Wheel Outfit, with 9 tooth KIL-WEED KULTIVATOR attachment	$6.25
1 6 Prong Rake	.80
1 8 in. DUBL-DUTI	1.15
1 Furrow Closing Blade	1.15
1 Right Hand Moldboard Plow	1.20
1 Furrow Opening Blade	.85

This is the combination outfit pictured above and alongside. It is a substantial value in every way at $10.00 but, in order to further popularize Gilson Garden Tools we'll send you

Two Extra Handy Helpers
(shown to right)
FREE!



With each Gilson Outfit No. 2 will come

1, 1 3½" ***Gilson Dubl-Duti***—the handiest scuffle hoe for work around flower beds and shrubbery border (sent minus handle easily obtained at any hardware store).

2, 1 ***Wonder Dandelion Digger***—the knife cuts the root deeply beneath surface, the prongs pull the weed bodily.

So satisfied are we with the value of above combination that we offer it under this unqualified guarantee:—

"Examine it upon receipt and if you feel that our claims are not based on facts, return the shipment at our expense and your money will be promptly refunded."

This is, we believe, the strongest guarantee ever offered in connection with any garden tool.

Please ask for free booklet

Get acquainted with the entire line of Gilson Garden Tools pronounced by experts to be the greatest boon to gardeners anxious to keep down weeds, retain moisture through dustmulching and thus help the garden bear bigger, better crops. Gladly mailed free—please mention this publication.

J. E. GILSON COMPANY

210 Valley Street Port Washington, Wis.

Three Exquisite Garden Flowers

Astilbe, Anemone and Chrysanthemum

Astilbe, crowned in spring with feathery, conical spikes of white, pink, or rose; delightful effects.
Sturdy, 4-inch, field-grown, potted plants ready to ship any time.

Anemones announce early fall, and continue to bloom until hard frosts. Tall, slender-stemmed, stately, glorious white or pink flowers intensified by a coronet of golden stamens.
Robust, 3-inch, field-grown, potted plants.

Chrysanthemums close the garden year with white, pink, bronze and gold. Courageous flowers, defying Jack Frost until winter comes.
We have only well rooted, strong field-grown plants.

Better Plants by Farr

Our catalogue describes these and other selected perennials and shrubs you'll be proud to grow; all have been grown and proved before being admitted to Better Plants. It is free to Garden Magazine & Home Builder readers.

BETTER PLANTS by Farr

BERTRAND H. FARR—
Wyomissing Nurseries Co.
104 Garfield Ave., Wyomissing, Penna.

Lifetime Protection for Your Home and Property

Order it now—a Page Fence that will make your property *yours*—make your boundary line the turning point for every intruder—give you the security and seclusion that will encourage further development of your grounds.

The Super-Heavy Zinc Coat, added to other superiorities of Page Wire Link, makes it the lifetime fence of real protection—safeguarding your property at a cost of a few dollars a year. Write for the Page Fence Book and the name of the Page Fence man near you. No obligation. Address

The Page Fence & Wire Products Association
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Distributing wire-link products for the Page Steel & Wire Co., Associate Company o fthe American Chain Co., Bridgeport, Conn.

PAGE STEEL AND WIRE QUALITY PRODUCTS

America's first wire fence-1885

PAGE
PROTECTION FENCE

Why Buy at Rosedale?

Among many reasons, Rosedale offers a complete line of well-grown stock at prices as low as consistent with highest quality.

Do you wish to screen a garage or an unsightly object? We have the choicest material for this purpose at a reasonable price, both in Evergreens and in large Shrubs:

For foundation planting, we carry over seventy varieties of Evergreens. Many of these we also offer in large specimens for landscape effect.

Rosedale has a great reputation for Roses of the highest quality. This is one of our leading Spring specialties and we do not yield to any grower in quality of stock or in price. "I cannot speak too highly of the Roses received from you in the Spring of 1924," writes a delighted customer of Gloversville, N. Y. "Each of the 76 is alive, and the results from them, as far as blooms go, have simply been phenomenal."

With prices of fruit almost prohibitive, ***why not plant some of our Trees of Fruiting-age.*** These trees will pay for themselves in one crop. Many of them have borne fruit the past two years in the Nursery.

We also carry a general assortment of Flowering Trees and Shrubs, Deciduous Trees, including Lindens, Maples, Birches, etc., in both ordinary and large sizes.

Your address will bring two catalogues, one February 1st, one August 1st, both helpful in their simplicity and their practical wealth of information.

ROSEDALE NURSERIES

"Outfitters for the Home Grounds"

Box A **Tarrytown, N. Y.**

ENTRANCE
4 ft. wide, 7 ft. high, Style 33, painted one coat, $31.50
fence, 5 ft. high, $20 per 8 ft. section, ready to set in place

TRELLIS
2 ft. 6 in. wide, 8 ft. high, Style 45, painted three coats, $12 one coat, $10.80

ROSE ARBOR
with seats, 8 ft. wide, 4 ft. deep, Style 20, painted three coats, $95 one coat, $85.50

ROSE ARBOR
4 ft. wide, 2 ft. 4 in. deep, Style 10, painted three coats, $37.50 one coat, $33.75

ENTRANCE
4 ft. wide, 8 ft. high, Style 14, painted 3 coats, $24; with gate, $40; 1 coat, $21.60 with gate, $36

ROSE ARCH
4 ft. wide, 20 in. long. Style 15, painted three coats, $28 one coat, $25.20

ROSE ARCH
4 ft. wide, 20 in long, Style 25, painted three coats, $32.00 one coat, $29.20

BEAUTIFY your home garden

Your home deserves beautiful surroundings. Perhaps one of the attractive articles illustrated will add just the touch of beauty and charm your yard or garden needs.

As America's largest producers of quality garden equipment, we can quote unusually low prices. Prices shown are for cash, f. o. b. factory. You may order direct from this advertisement. Or send 30c for Catalogue H-34, filled with suggestions.

HARTMANN-SANDERS CO.

Visit New York Flower Show
Grand Central Palace March 16 to 21

KOLL LOCK-JOINT COLUMNS

Pergolas, Entrances, Rose Arbors, Garden Furniture and Accessories

General Offices
2187 Elston Avenue
Chicago, Illinois

Showrooms
6 East 39th Street
New York City

The Best The World Affords!

I BELIEVE in strong statements if they are based on facts! The headline above refers to Totty's Chrysanthemums for 1925. I only wish it were possible to convey to you the care and judgment exercised in making up the collection. As it stands it is an assembly of peers of their kind.

Charles H. Totty

Mrs. F. E. Lewis (*Illustrated below*) is easily the finest red I have introduced in 20 years. A marvelous deep crimson with old gold on reverse side of petals. This is but one of the Pockett-Totty set of eight superb exhibition novelties for 1925. All "underglass" gardeners will be delighted with it. Price $2.00 each, $20.00 per dozen.

Hardy 'Mums for the Outdoor Garden

Yes, we have the largest and most complete collection in the country.

Special Offer: **100 plants, in 15 choice varieties, all named, but our selection, for $15.00**

The Totty Year Book

is better and brighter than ever before. It holds the key to gardens of NEW delights, being recognized as the foremost exponent of worth-while floral novelties. Gladly mailed free—please mention G. M.

CHAS. H. TOTTY COMPANY

Headquarters for Flowers, for Garden and Home

Madison, New Jersey

Better Flowers for Discriminating Buyers at 4 East 53rd St., New York City

Lilacs

WITH their wealth of perfumed beauty *Lilacs,* theme of song and story, conjure up thoughts of sweet old-fashioned gardens, the secrets of romantic legends.

A grouping of *Lilacs* with their bright green foliage and large fragrant clusters of flowers gives a charming beauty to garden and lawn in earliest spring. In bush form *Lilacs* create pictures out of bare spots, while a *Lilac* tree is a beautiful bouquet on an open lawn.

All of the following varieties thrive in any fertile soil and can be used singly, massed or in groups to produce the desired effect.

OUR "HIGHLAND PARK" COLLECTION *$10.00*

De Miribel—Single, large panicles of bluish violet color, very dark and rich, extra.

Pasteur—Single, vinous red turning to black red, one of the best dark sorts.

Roi Albert—Late flowering sort—of great value for cut flowers—buds purple, shaded mauve when expanded.

Chas. Joly—The opening flowers are of deep wine red and change to a light purple red. One of the best double, dark flowering lilacs.

Mme. Abel Chatenay—Double; sweetly scented pure white flowers in large panicles.

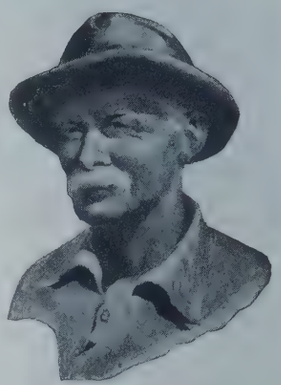
Pres. Loubert—Large double flowers, purplish red—a distinct shade.

Write for our beautiful free thirty-two page Catalogue "D" illustrated in colors. In it you will find fruits, berries, evergreens, nut and shade trees and all kinds of flowering shrubs. We can supply your needs whether they be for a single shrub or the landscaping of a hundred acres.

GLEN BROTHERS, Inc.
Nurserymen and Landscape Architects
GLENWOOD NURSERY
ROCHESTER NEW YORK

Flavor in Vegetables—

a neglected art except in the home garden. Even there you are likely to pass it by unless you select varieties developed for their rare flavor and tenderness. For Four Dollars we will send you the following 20 garden varieties which are well known for their table quality. The quantities are sufficient for a family of five. They may be bought as a group or individually at prices quoted:



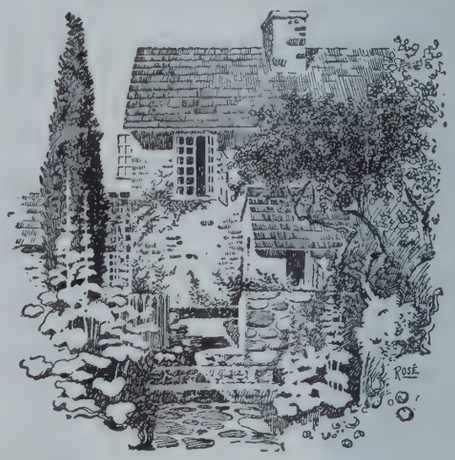
"Play it safe neighbor Plant Stokes Seeds"

1 lb. Lima Beans, Carpinteria Pole $.40	1 pkt. Cucumber, Windermoor Wonder ....$.10
1 oz. Beet, The Century ..... .20	1 pkt. Lettuce, Salamander ..... .10
1 oz. Swiss Chard, Silver Leaf ... .15	1 pkt. Muskmelon, Hearts of Gold. .10
1 pkt. Brussels Sprouts, Cambridge Champion ..... .10	1 pkt. Watermelon, The Angelino (New) ..... .10
1 pkt. Cabbage, (New) Jersey Wakefield ..... .10	2 lbs. Peas, The Marchioness ..... .70
1 pkt. Cabbage, Pocono Mountain Savoy ..... .10	¼ lb. Radish, Early Scarlet Globe. .30
1 pkt. Carrot, The Coreless ..... .10	¼ lb. Spinach, New Zealand ..... .30
1 pkt. Cauliflower, White Mountain Erfurt ..... .25	1 pkt. Tomato, Stokes Bonny Best. .10
1 pkt. Celery, Columbia ..... .15	
1 pkt. Celery, Giant Pascal ..... .15	
1 lb. Corn, Golden Bantam ..... .30	
1 lb. Corn, Sunny Slope Special... .30	

Stokes 1925 Catalogue

is devoted entirely to vegetables. It is illustrated throughout in natural colors. This book will prove valuable to all those who know the rare pleasure of dining on well-grown delicacies still rich with the flavor of the garden. A post card brings it by mentioning the Garden Magazine & Home Builder.

FRANCIS C. STOKES & CO.
Vegetable Seeds
235 East Washington Square, Philadelphia, Pennsylvania



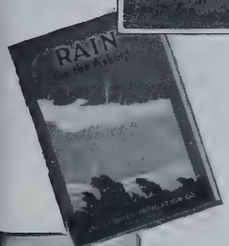
The Book of Building and Interior Decorating

edited by Reginald T. Townsend
editor "Country Life"

A book of beautiful illustrations on building and decorating, supported by explanatory articles by Jesse Martin Breese, Charles Over Cornelius, Waddy B. Wood, Leslie W. Devereux, and others.

Price $2.00

Doubleday, Page & Company



Nature Needs Help to Produce a Perfect Lawn or Garden!

Would you like to have more and better flowers and vegetables from your garden—your borders and lawn kept in perfect condition—WITH LESS LABOR? The Skinner System of watering will help produce these results for you—easily, certainly economically.

The Skinner System irrigation experts have published a most interesting book called "Rain," which tells a lot of facts most folks know very little about—why water should be used—the ways to water and the results that can be expected.

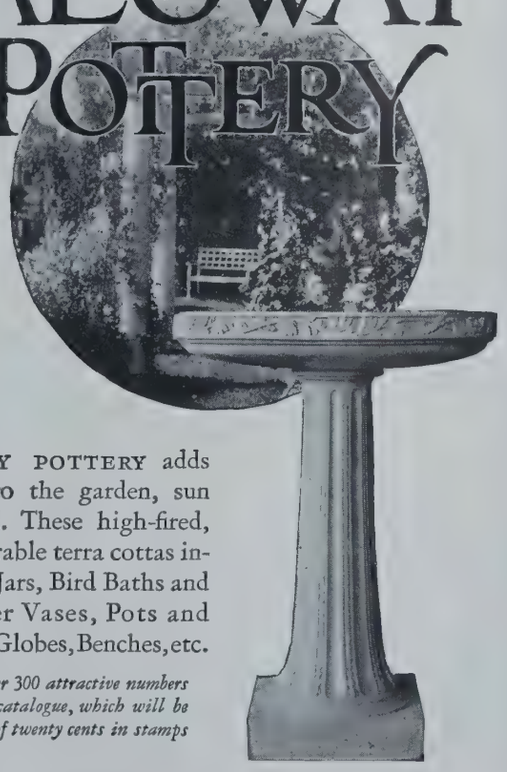
Whether you have a small home garden, lawn, or a big estate covering many acres you will find this book valuable and extremely interesting. When writing for your copy, please state whether you are interested in lawn or garden watering.

The Skinner Irrigation Company
219 Water Street, Troy, Ohio

SKINNER SYSTEM OF IRRIGATION

GALLOWAY POTTERY

ESTABLISHED 1810



GALLOWAY POTTERY adds interest to the garden, sun room and hall. These high-fired, strong and durable terra cottas include shapely Jars, Bird Baths and Fonts, Flower Vases, Pots and Boxes, Gazing Globes, Benches, etc.

A collection of over 300 attractive numbers is shown in our catalogue, which will be sent upon receipt of twenty cents in stamps

GALLOWAY TERRA-COTTA COMPANY
3214 WALNUT STREET, PHILADELPHIA.

Better Looking Lawns with Less Energy—

ENERGY—ambition, if you please—is one of mankind's most valuable attributes. How much of it do you expend on your garden? "Enough," you'll say and we know it's true or you wouldn't read this publication! And so we'll put the question a little more pointed and ask "how much do you expend on your lawn with poor or worn out tools?"

The Lawn Mower question is the proverbial "bone of contention" in many Garden Homes. The sure way to get everybody enthusiastic about mowing the lawn is to investigate the merits of

THE GENUINE
"PHILADELPHIA"

Made by The Original People in the Lawn Mower Business. Over half a century of doing one thing well has resulted in a line of mowers that is practically troubleproof. Correctly designed, well balanced, made of material guaranteed against flaws, we challenge the world to produce better mowers than those we turn out. After a quarter century's service many ***"PHILADELPHIA"*** Mowers are still "going strong."

Many Styles for different Uses
—Ask Progressive Dealers—The World Over

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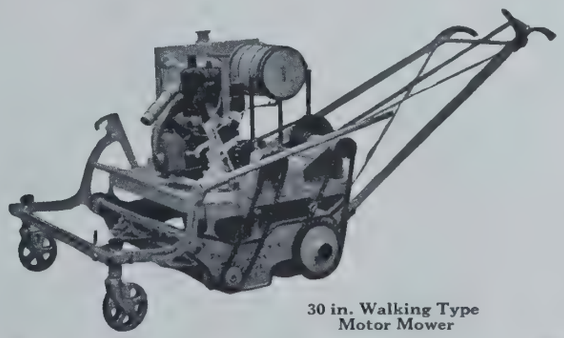
The Philadelphia Lawn Mower Co.,
31st and Chestnut Sts., **Philadelphia, Pa., U. S. A.**



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HENDERSON'S SEEDS ARE TESTED SEEDS—THE STANDARD SINCE 1847

Brilliant Mixture Poppies
Large Early Flowering Mixed Cosmos
New Giant Large Flowering Mixed Zinnias
EVERYTHING for the GARDEN

208 pages
1,000
pictures

Henderson's

NEW OFFER
1925 SEED CATALOGUE
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What this book contains

208 pages packed with valuable garden information. Over 1,000 pictures showing actual results from Henderson's tested seeds. Describes hundreds of varieties of flowers and vegetables perfected by Peter Henderson & Co. through 78 years' experience.

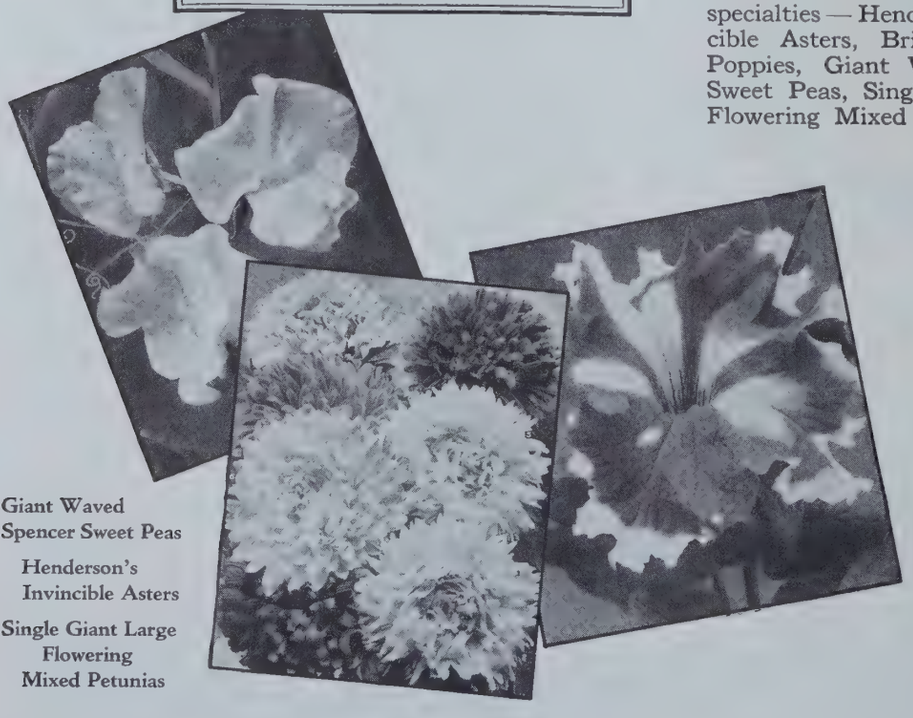
Offers dozens of specially selected collections of flower seeds arranged especially for harmony of color and continuity of bloom. Tells you when to plant the different varieties of flowers and how—valuable cultural directions which guide you in making your garden more beautiful and more productive. Includes a calendar of planting dates for flowers. Gives proper remedies for insects and fungus. Illustrates necessary garden implements, their uses, prices, and complete description.

Get this Henderson catalogue before you buy flower seed. Clip the coupon now!

Mail coupon with only 10c and we will send you "Everything for the Garden," Henderson's new seed catalogue, together with Henderson's new flower seed offer —6 packets of tested flower seeds.

These six packets of flower seeds include Henderson's most famous specialties — Henderson's Invincible Asters, Brilliant Mixture Poppies, Giant Waved Spencer Sweet Peas, Single Giant Large Flowering Mixed Petunias, New Giant Large Flowering Mixed Zinnias, Large Early Flowering Mixed Cosmos—the loveliest and most prolific of their kind. These seeds, like all Henderson's seeds, are tested seeds.

Many of the accepted methods of testing seeds were originated by Peter Henderson over a generation ago. These methods, improved by years of experience, still safeguard the standard quality of Henderson's Seeds.



Giant Waved Spencer Sweet Peas

Henderson's Invincible Asters

Single Giant Large Flowering Mixed Petunias

Coupon Envelope Counts for Cash

This special collection of flower seeds comes to you enclosed in a coupon envelope, which emptied and returned to us, will be accepted as 25c cash payment on any order of a dollar or more.

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Enclosed is 10c for Henderson's Seed Catalogue and 6 packets of famous tested flower seeds.

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Garden Magazine & Home Builder

FEBRUARY, 1925

Volume XL — Number 6

LEONARD BARRON, Editor
LUCY E. HUBBELL, Associate Editor

March
Featuring Roses and Small Homes

ADVENTURES IN THE NEWER ROSES by *J. Horace McFarland*, Editor of the "American Rose Annual," is an authoritative report of recent findings written with the enthusiasm and discernment which characterize all the friendly utterances of the owner of Breeze Hill—a rather special plum for Rose lovers everywhere! And for southern gardeners comes ROSES FOR THE MID-SOUTH by *J. Woodward Manning*, landscape architect and plantsman of long experience with growing things in that section. A "human interest" story of America's greatest rosarian, Dr. Van Fleet, THE MAN WHO MADE THE SILVER MOON AND OTHER POPULAR ROSES, is written in the free journalistic style of *Lewis Theiss*, formerly of the New York *Sun*.

The first of a series of illustrated articles on THREE CENTURIES OF AMERICAN HOMES AND THEIR SURROUNDINGS by *Ellen D. Wangner*, will give a brief, authentic picture of the historical background with descriptions of furniture, dishes, silver, glassware, draperies etc. appealing to the modern home owner as well as to the collector, as Mrs. Wangner will tell of reproductions now manufactured, where and how they may be secured. RELATING THE HOME GARAGE TO THE HOUSE by *Phil M. Riley* and USING TILES DECORATIVELY INDOORS AND OUT by *Estelle H. Ries* will appeal to the home builder, and housekeepers will enjoy GLASSWARE FOR EVERYWHERE.

Four pages of pictures and plans of friendly little houses by leading architects will be presented so as to furnish suggestions both for the man who is planning to build and the man who is hoping to improve the house he already has.

For the practical gardener there will be BEST VEGETABLES FOR THE LITTLE SUBURBAN GARDEN by *Albert Lowenfels;* MOTORIZING THE LAWN MOWER, THE NEW GAS WARFARE IN THE GARDEN, and SUCCESS WITH CELERY.

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BOBBINK & ATKINS

Visit Nursery

Ask for Catalogs

ROSES

Spring Planting

An illustrated complete list of Roses that we shall have for Spring Planting will be ready to mail in February. Many Roses are beautifully illustrated in color, among them, Rev. F. Page-Roberts, Star of Persia, and other new and unusually attractive varieties. This list of Roses is without a doubt the most complete and unique ever published. We have several hundred thousand rose plants ready to ship to any part of the country where Roses can be planted at this time.

Golden Ophelia

This is the true Golden Ophelia Rose which differs from that sometimes sold under the name Golden Ophelia. The true Golden Ophelia is a superior Rose.

Hardy Herbaceous Plants

A complete catalog of Old Fashioned Flowers, Irises and Peonies, Hardy Chrysanthemums, Delphiniums, Rock Garden Plants in large variety. Beautifully illustrated in color and black. It contains an alphabetical table, indicating Flowering Period, Height, and Color.

Evergreens, Trees, Shrubs and Vines

An illustrated Catalog of Nursery Stock such as Evergreens, Evergreen Shrubs, Deciduous Trees, Flowering Shrubs, Hedge Plants, Hardy Vines, Fruits, pot grown Japanese Holly, and Evergreen Hawthorn.

Hardy Evergreen Azaleas

We grow a complete collection of these attractive garden decorative plants. They should be used freely in groups with or without other broad leaved Evergreens. They are most attractive for Rock Garden. They are listed and described in our Evergreen Catalog.

Our Giant-Flowering Marshmallow

Our Marshmallows are distinctive from all others. Ask for our colored illustrated leaflet.

Lilacs

We have a special pamphlet of the Lilacs, which we shall be pleased to mail to anyone interested.

In your request for catalog, it is important to state definitely what you intend to plant.

BOBBINK & ATKINS

Nurserymen and Florists **Rutherford, N. J.**

Rosemary

The Wonderful New Gladiolus

A triple hybrid.

As unusual as it is beautiful.

Perfectly adorable in its delicate coloring.

White, marked with fine hair lines and stippling of lavendar-rose which is pure pink under artificial light.

The markings are carried clear through the petals, so that the back of the blossom looks the same as the front.

Good sized blooms carried on tall, straight, gracefully erect stems. Several open at one time.

Easily arranged in basket or vase, for it is not necessary to have the spikes facing outward, as the backs of the blossoms are as handsome as their faces.

There never was a "glad" like

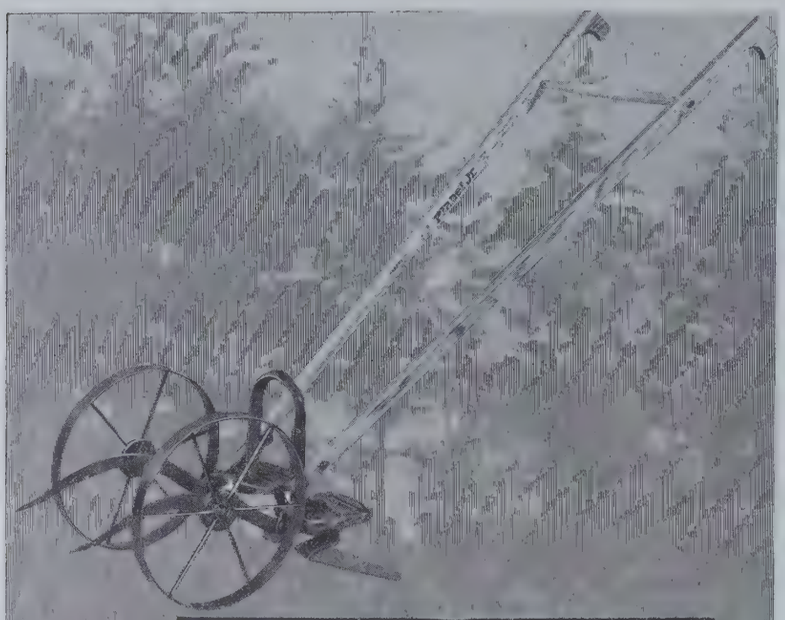
Rosemary

A blooming sized bulb for two dollars; three bulbs for five dollars.

As the supply is quite limited, we must restrict the number of bulbs to but three to any one person.

YOU'LL REGRET IT IF **ROSEMARY** IS NOT IN YOUR GARDEN NEXT SUMMER.

TRIANGLE FARMS
(Dr. B. R. Bales, Prop.)
Twenty-two Acres of Flowers
CIRCLEVILLE, OHIO



The Biggest Thing in Your Garden!

FOR results there is no comparison between Planet Jr. Garden Implements and old-fashioned tools. You can't imagine how much they add to the pleasure of gardening. A Planet Jr. Wheel Hoe such as the No. 12 Double Wheel Hoe here shown, weeds, cultivates and mulches, all in one operation. It leaves the ground mellow, level and smooth, and the ease and speed with which it enables you to hoe the entire garden will amaze you. No. 12 is stiff yet light-running. It hoes both sides of the row at once, permitting close work, and is equally useful for cultivating between rows.

Planet Jr. Garden Seeders and Wheel Hoes are sold by implement, hardware and seed houses everywhere. Ask your dealer for the Planet Jr. catalogue, or write to us for your copy.

S. L. Allen & Co., Inc.

Largest Manufacturers of Specialized Field and Garden Implements in the World

DEPT. 32

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Look for "Planet, Jr."

Planet Jr.

Improved European Filberts

Beautiful Shrubs and Real Nut Producers

Hardy and adapted to the more Northern states—these beautiful plants fill an important place in ornamental plantings and nut borders for Walks and Drives. Other Hall specialties are:

Mary Wallace—Hardy Pillar Rose. A fine, strong, self-supporting Rose 6 to 8 feet high, with large, glossy foliage. Blooms freely in Spring and has fine buds in Summer and Fall. Flowers semi-double, bright, clear rose-pink, with salmon base.

Silver Lace Vine (Polygonum Aubertii)—The fastest growing climbing vine known—(splendid coverage the first year).

Lodense (The New Dwarf Privet)—Only 8 to 10 inches high—ideal for edgings where the ordinary hedge is too high.

New Everblooming Rugosa Rose—For mass and hedge plantings—(not for the rose garden).

Everblooming Red Rugosa

Clusters of beautiful bright red flowers resembling bunches of red carnations. Very double with petal edges serrated and with the beautiful deep green, healthy foliage characteristic of the Rugosa Rose. Blooms continually from early Summer until frost.

These are only a few of our specialties. Many others are illustrated in full color in our Free Catalogue. **Send for Catalogue to-day** and find out about our splendid assortment of Fruit and Ornamental Trees, Shrubs, Roses, Berry Plants, etc.

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479 Cutler Bldg. Rochester, N. Y.

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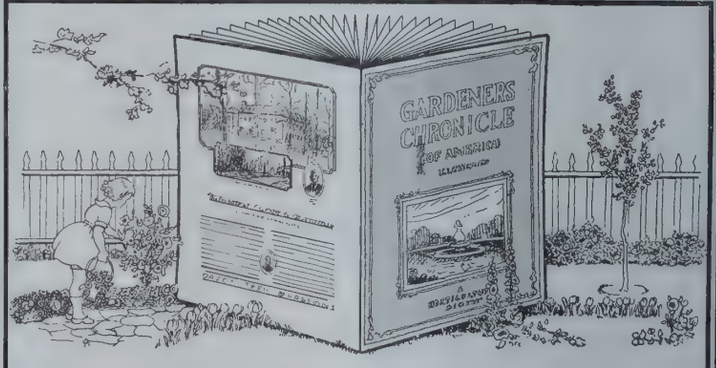
Splendid Nursery Stock of all kinds



Wonderful Response from Garden Lovers

In the November issue of the *Gardeners' Chronicle*, we invited gardeners to submit their own experiences in handling plants. The response was immediate and spontaneous. Coming issues will contain these first-hand experiences.

Then there will be the usual feature articles by leaders in the gardening profession—H. Ernest Downer, Robert Weeks, George Hewitt and others. The folks who write for the *Gardeners' Chronicle* actually live with plants the year round.

Our editor is the secretary of the National Association of Gardeners, and the *Gardeners' Chronicle* gives its official reports. It also reprints by special arrangement the most helpful articles from leading British garden magazines.

Every garden enthusiast should get acquainted with this magazine devoted exclusively to gardening, unlike any other.

Send check for $2 for a full year's subscription, or $1 for a six months' trial. If you are an advertiser in GARDEN MAGAZINE & HOME BUILDER, a request on your letterhead will bring you a sample copy and rate card.

GARDENERS' CHRONICLE

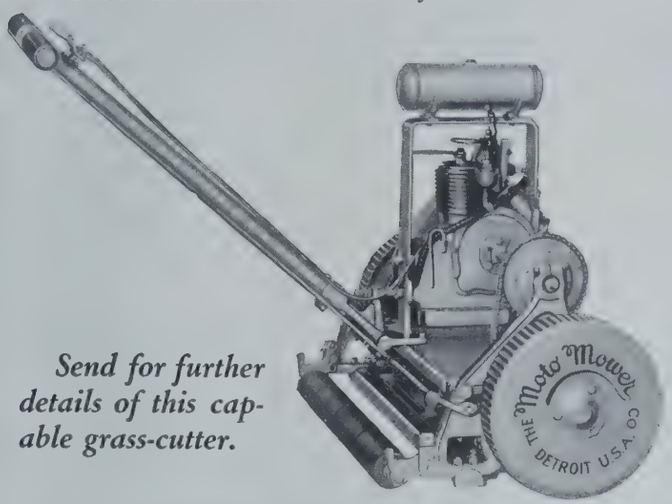
286-A Fifth Ave. New York City

"The ONLY All-Gardening Magazine"

Cuts Evenly and Cleanly

Around Trees and Shrubs: Takes Drudgery out of Grass Cutting

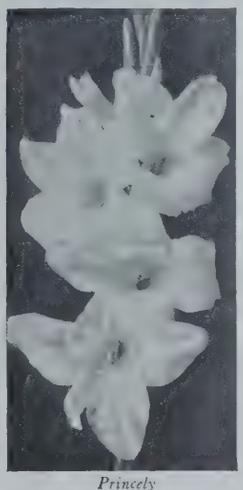
To the roughest lawn, the Moto-Mower gives a clean, well-kept look. Climbs steep grades on its own power. Operates easily in close quarters—around trees, shrubs and buildings. Cuts a wide, smooth strip of close-cropped lawn. No physical effort is required. Expense and upkeep negligible. Read what enthusiastic owners say.



Send for further details of this capable grass-cutter.

THE MOTO-MOWER COMPANY
3248 Woodbridge Street Detroit, Michigan

Jersey Dahlias Now Leading The World



Princely

More worthwhile new Dahlias will be introduced by New Jersey growers in 1925 than by growers in any other state in America. My 1925 Catalogue lists 17 of these new varieties of Jersey Origin—Foremost of which are:—The New American Beauty Rose colored variety "Robert Treat," winner of Garden Magazine Sweepstake's Prize at last New York Show; and "Mordella" the beautiful apricot buff colored decorative, which I am introducing and featuring for 1925. Among other fine Jersey originations are The Trentonian, Charles Stratton, Emma Marie, Eastern Star, Sunny Jersey, Jersey's Beacon, Little Silver, Jersey's Mammoth, E. D. Adams, Jersey's Sovereign, Jersey's Monarch, Jersey's Matchless and Wildrose. All listed and fully described in my 1925 Illustrated Dahlia Catalogue —free for the asking—

Robert Treat

KEMP'S WONDER GLADS

Mordella

Special Get Acquainted Offers

I want Home Garden owners to become acquainted with the wonderful beauty and immense size of these Gladioli.

For $1.00 ($1.10 to Canada)—I will send postpaid 10 First Size bulbs, 10 varieties, each labelled. For $2.00 ($2.25 to Canada)—I will send postpaid 50 smaller size blooming bulbs. Orders may be placed now for March delivery.

To Grow Them Is to Know Them—
To Know Them You Must Grow Them

J. A. KEMP--GLAD--DAHLIA SPECIALIST
Breeder and Grower
Little Silver New Jersey, U. S. A.

Glass Gardens

Because We Build The Big Houses So Well We Build the Small Ones So Much Better

TAKE, for example, the 1650 dollar greenhouse.

It is built of exactly the same high class materials, and by the same specially trained men, as our finest groups of ornamental houses.

The remarkable thing is that the complete materials and equipment for a house 15 feet wide and 33 long can be bought for so little as 1650 dollars.

When you further consider that the equipment includes all the plant benches, and heating, even to a Burnham Boiler, the price becomes still more of a wonder.

Just naturally you want to see an illustration of it, both inside and out.

Anticipating that, we have prepared a special circular which will answer all your questions.

Send for it.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

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AMERICA'S CHAMPION GLADIOLI

The best bulbs grown *in the* world are not too good *for* your garden.

ELMWOOD TERRACE stock will bring *to* you new *and* higher standards *of* bulb *and* bloom perfection—new delight *in* richer success.

WE are not hybridizers. We are collectors, growers *and* distributors *of* choicest commercial varieties *and* exhibition favorites. *The* finest originations are selected, improved, strengthened *and* multiplied *in* this ideal soil *and* climate—are made more beautiful *and* hardy *for* superior reproduction.

FOUR YEARS *of* exhibition triumphs are behind ELMWOOD TERRACE GLADIOLI *to* prove their supremacy. *In* 1923 *and* 1924, they were awarded that highest *of* show honors, *the* Achievement Medal *by the* American Gladiolus Society. They hold *the* Burpee Trophy *for* finest *of* all varieties, *the* Kunderd Gold Medal *for the* largest *and* best collection *of* Kunderd originations—*and* scores *of* other most coveted awards.

Booklet upon Request

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Box 388, Bennington
VERMONT

COLLECTION
Splendid mixture, 100 named but not labeled varieties, worth $10 *to* $15, only
$5.00 POSTPAID

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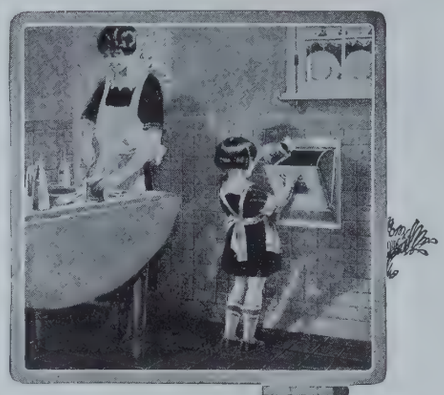

Instant Waste Disposal—
Without Leaving the Kitchen

PLAN, *before you build*, for life-time release from the garbage nuisance. Let the time-tried Kernerator, at one moderate first cost (and no expense whatever afterward) change waste disposal into your easiest task.

Just imagine the convenience of merely dropping tin cans, garbage, papers, magazines, broken glass and crockery—in fact, all waste—through a hopper door right in your kitchen. No daily trips to garbage pail; no carrying of trash to basement.

The Kernerator consists of a brick combustion chamber at the base of your regular chimney, connecting with the hopper doors on floors above. Into this falls all the waste, which is destroyed by an occasional lighting. All combustibles are burned; non-combustibles are flame-sterilized for removal with the ashes.

The Kernerator must be built-in—it cannot be installed in existing buildings. Thousands in use—broadly guaranteed.

Consult your architect—he knows and will recommend the Kernerator—or write

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KERNERATOR
Built-in-the-Chimney
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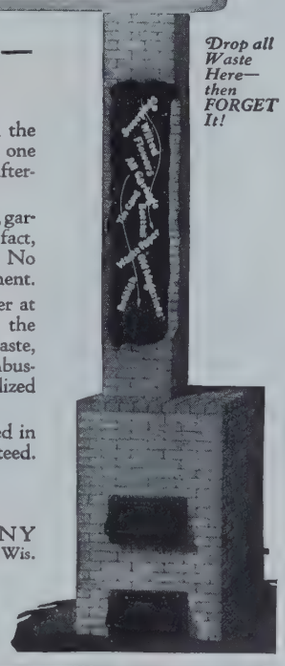

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In the Coldwell Model "L" Motor Lawn Mower and Roller are combined simplicity and dependability, giving in results—economy and beauty. It cuts extreme grades. Easy to operate around trees, shrubbery and along walks.

THE NEW DETACHABLE UNITS
DOUBLE CUTTING CAPACITY

After cutting small areas, the gang units may be attached to increase the cutting width to more than twice its former capacity. These new gang units are made so that they may be quickly attached or detached to any Coldwell Model "L" now in service. We will be pleased, at your request, to send more detailed literature.

SINCE 1867
COLDWELL

HAND HORSE | *Dependable* LAWN MOWERS | MOTOR GANG

COLDWELL LAWN MOWER COMPANY, NEWBURGH, N. Y., U. S. A.

Blue Perennials

Does your garden tell you that a little more touch of blue is needed, or do you especially like blue in your garden scheme? Following are a dozen blue perennials that will add to your garden joy.

Baptisia australis
Campanula carpatica
Delphinium blue hybrid
Delphinium belladonna
Echinops ritro
Eryngium amethystinum
Myosotis (Forget-me-not)
Polemonium reptans
Platycodon blue
Veronica spicata
Salvia azurea grandiflora
Centaurea montana

Special Offer: **I will send one of each of the above 12 varieties, labeled and carefully packed, carriage charges paid, for $2.50, or 5 of each variety, 60 plants in all for $10.00.**

For that shady nook

Many gardens present the problem of a shady spot where ordinary flowers will not grow. If the shade is very dense, I can send you 20 heavy fern clumps for $5.00, or 10 clumps for $3.00. For more moderate shade the following collection is recommended.

Eupatorium ageratoides, Spiraea ulmaria fl. pl., Lily of the Valley, Astilbe, Aquilegia, New England Aster, Anemone pennsylvanica, Forget-me-not, Hemerocallis, Sedum spectabile, New England Aster, Platycodon.

Special Offer: **One each of the above 12 varieties for $2.50, 5 of each for $10.00 carriage paid.**

"Hardy Plants for the Home Garden," is the title of my illustrated catalogue of Hardy Perennials, gladly sent free on request.

W. A. TOOLE, ***Garry-nee-Dale***
Baraboo Wis.

Cedar Acres

Gladioli and Dahlias

"BULBS THAT BLOOM"
B. Hammond Tracy Specialist

Quality Has Been Our Motto for Over a Quarter of a Century

Three Unusual Primulinus Gladioli Novelties

Jasper Rose deep rose - - - **$3.00 Each**
Copper King Copper tinted red **1.00** "
Bittersweet Salmon yellow - - **2.00** "

One Each for $5.00

SPECIAL

12 Large Flowering and Ruffled Gladioli for 50c

25 for $1.00 Postpaid

Our booklet, in which are listed the very best in Gladioli and Dahlias, will be helpful in your garden and will be sent to you, free on request.

CEDAR ACRES
Wenham Box 116 Massachusetts

Choose Evergreens Wisely

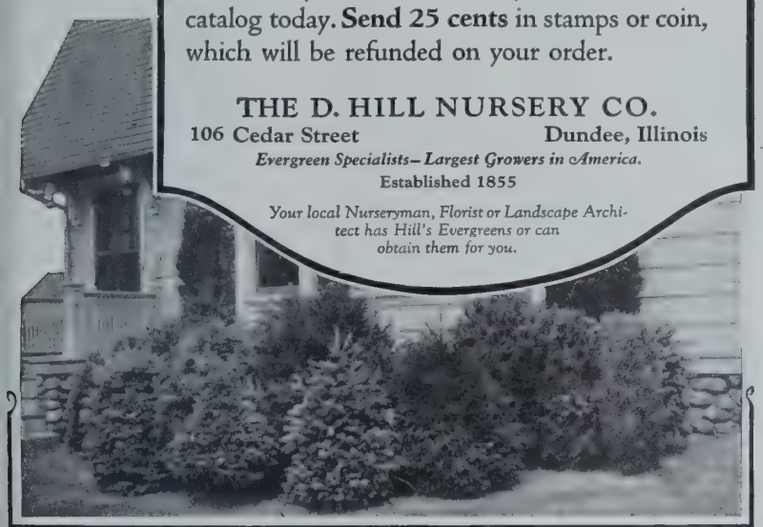
Our 1925 catalog contains 76 pages and nearly 100 illustrations — 24 of them in full color. The descriptions are complete and authentic. It gives information regarding color, shape, size and best uses of the different varieties. Living green all the year 'round, blending with every season's hues.

HILL'S EVERGREENS

Add beauty and charm to any home. Write for catalog today. **Send 25 cents** in stamps or coin, which will be refunded on your order.

THE D. HILL NURSERY CO.
106 Cedar Street Dundee, Illinois
Evergreen Specialists—Largest Growers in America.
Established 1855

Your local Nurseryman, Florist or Landscape Architect has Hill's Evergreens or can obtain them for you.



Make Your Lawn a Part of Your Home.

You can make your lawn a delightful part of your home, —a protected beauty spot for grass and flowers,—and a safe place for children to play, by inclosing it with an attractive fence.

Pittsburgh Perfect Super-Zinced Ornamental Fences are distinctive in design, permanent, and afford privacy and protection. They enhance the appearance of any lawn, keep out vicious dogs, and safeguard children from the dangers of the street.

Our booklet will help you choose the fence you need. Mailed free upon request. Use the coupon or postal card.

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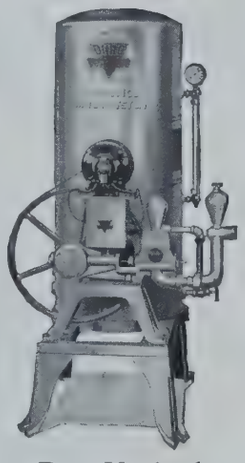
Pittsburgh, Pa.

Gentlemen: Please send me, FREE, Your Booklet "Lawn Fences That Protect and Beautify".
Name
Address

DURO GUARANTEES SATISFACTORY WATER SERVICE

"Yes, I was perplexed about WATER SUPPLY"



Duro Vertitank

The Vertitank System is a compact unit—automatic pump and steel tank — mounted upon a sanitary base. Three sizes — with pumping capacities of 120, 180 and 360 gallons per hour.

Thousands of these systems are in daily use supplying the equivalent of city water service to suburban and rural homes, or pumping soft rain water from the cistern to kitchen, bath and laundry. Entirely automatic in operation—starting and stopping without attention.

This is only one of many popular Duro systems. There are others ranging in price from $79.50 upward.

"I investigated many pumps and water systems. The more I investigated, the more confused I became. Everywhere I went I heard 'best' or 'cheapest.'

"Then I consulted Duro Advisory Service. I shifted the responsibility upon Duro and they were ready to accept it."

DURO Water Systems

Duro can well afford to do this—for Duro is the largest manufacturer of water systems and water softening plants exclusively.

Duro makes a pump or system for every possible use—deep wells, shallow wells, cisterns; ranches, farms, suburban homes, city residences, summer cottages, and even motor boats. Whatever you need, Duro has it—at prices from $79.50 upward, f. o. b. Dayton.

More than 200 factory-trained field men are in constant touch with thousands of preferred Duro dealers throughout the United States and Canada. Thus Duro is able to assume the responsibility for every Duro installation.

After all, what you want is *efficient water service.* Duro guarantees you that. It is wasteful and extravagant to buy more pumping capacity than is needed—yet infinitely worse to install an unsatisfactory system just because it is cheap.

Make use of the Duro Advisory Service It is *free.* Simply write to-day for the *Free Consultation Blank.*

ADVISORY SERVICE — GUARANTEED DURO MADE BY THE DURO PUMP AND MANUFACTURING CO DAYTON OHIO

The Duro Pump & Mfg. Company
602 Monument Ave. Dayton, Ohio

SPECIAL ADVISORY COUNSEL FOR ARCHITECTS

LittleTree Farms

New Year Book

is more than a mere price list. It tells you in the simplest terms and with hundreds of photographs:—

How to frame your home in beauty
How to plan your garden
What plants to select
Where to place them
How to plant and care for them

Everything to plant from Evergreens to Perennials

Write to-day to Box 352 for your FREE COPY

Little Tree Farms
AMERICAN FORESTRY COMPANY
FRAMINGHAM CENTRE, MASSACHUSETTS

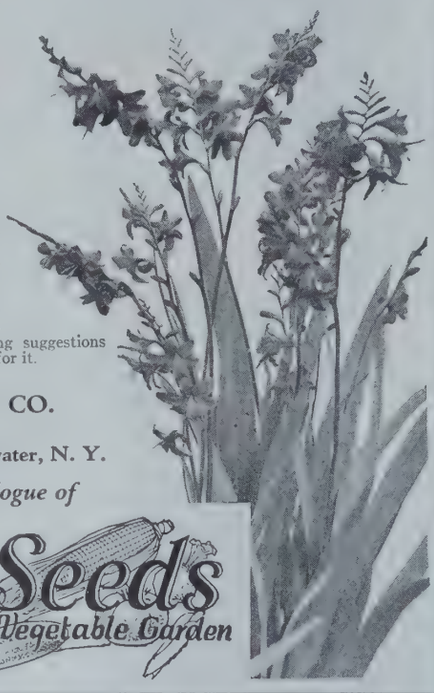
MONTBRETIA

A Flower That is Delightfully Different And Very Easy to Raise

MONTBRETIA is one of the most beautiful of the summer flowering bulbs and one of the finest for bouquets, yet one that few people know about. The graceful form of the flowers and the soft orange and red coloring make it stand out among the most attractive flowers in the whole garden.

The bulbs are so easy to raise that any one can have plenty of these delightful flowers in their own garden. Planted 3 inches deep in any good garden soil, they will blossom profusely from mid-summer until late fall. Do not fail to set out some bulbs this spring. Complete cultural directions accompany each order.

5 Bulbs 50c; 1 doz. $1.00; 50 for $3.50 postpaid



We are large growers of Vegetable Seeds, Flower Seeds, Gladioli, Dahlia, Cannas, and many other flowering bulbs and plants. If you wish to buy direct from the grower and get fresh seeds and bulbs raised with the utmost care and backed by our 46 years' experience, ask for our profusely illustrated catalogue containing many unusual and interesting suggestions for your garden. There is no charge for it.

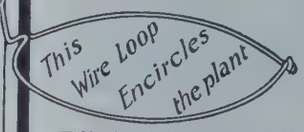
JOSEPH HARRIS CO.
R. F. D. 3
Moreton Farm Coldwater, N. Y.

Send for Catalogue of

Harris Seeds for your Flower and Vegetable Garden

"ADJUSTO" PLANT SUPPORTS

A sturdy hard wood stake, painted green, with a loop of galvanized wire instantly adjustable to any height.



Holds plant in air and sun. Enables cultivation close to roots. Gives more symetrical plants. Increases growth and fruitfulness. Can be used throughout the season successively on different plants or shrubs. Lasts for years.

SIZES AND PRICES

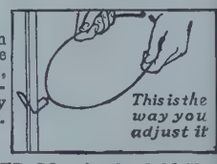
Stake 7/8 inches square. Diameter of loop 13 inches.

3 feet	$2.00 per doz.
4 feet	2.25 per doz.
5 feet	2.50 per doz.
6 feet	3.00 per doz.

For potted plants—stake 1/4 inch square. Diameter of loop 4 1/4 inches.

18 inch	$ .85 per doz.
24 inch	1.00 per doz.

If your garden supply house doesn't carry, order direct, enclosing money order or check.



FORREST SEED CO., Cortland, N. Y.

BLOSSOMS ON EVERY STEM

THE new Early Orchid-Flowering Sweet Peas bloom four weeks before other kinds and continue to bear Giant flowers, 2 inches across, in wonderful colors for months. Special Cut Flower Mixture of colors is 15 cts. a pkg; 65 cts. an ounce; $2.00 a ¼ lb. Postpaid.

You will find our Seed and Plant Book a mighty big help to you in selecting the best flowers and vegetables for your garden. It pictures and describes not only the best of the well known standard varieties but the finest of the most recent introductions, new things you will want in your garden. Send for it to-day. It's free.

HART & VICK, *Seedmen*
63 Stone Street Rochester, N. Y.

25 Choice Gladioli for $1.50

FISKE Gorgeous Gladioli

Plant a few FISKE bulbs each month from April to August 1st. and have a glorious riot of bloom 'till frost. Unsurpassed for cutting. The cream of the newer sorts. Blush and other pink shades—white and yellow. All top size bulbs ready for immediate delivery.

FISKE Catalogue FREE

If you are to have a garden send for this big 168 page book. Illustrated with many color pages. Mailed *free.*

25 bulbs $1.50. 50 bulbs $2.75. 100 bulbs $5.25 *Postpaid.*

FISKE SEED COMPANY
Formerly FOTTLER, FISKE, RAWSON COMPANY
12 and 13 Faneuil Hall Square Boston, Massachusetts

"A Little Book About Roses"

For 20 years rose lovers the country over and beyond have annually and eagerly looked forward to the publication of the above.

While primarily a catalog, it will be found attractive, interesting and helpful to the rose lover in an unusual degree. Its pages breathe the enthusiasm and experience of a lifetime devoted to the outdoor culture of the "Queen of Flowers."

The 1925 Edition

one of the very best ever issued, the quality of which reflects the quality of the business it represents, will be ready as usual February 1st.

A copy will be sent to intending purchasers on request, and to anyone, without obligation to purchase, on receipt of 10 cents in coin or stamps.

George H. Peterson
Rose and Peony Specialist
Box 50 Fair Lawn, N. J.

Green's Trees Shrubs, Vines

Just What Your Home Needs!

Beautiful flowering shrubs and vines to give it cosy attractiveness. Handsome ornamental trees, windbreaks, evergreens—to provide shade and a pleasing setting. Magnificent roses, gladioli, peonies, hydrangeas, etc.—to add beauty to your home grounds. What a world of satisfaction—and increased property value—such planting brings!

Dwarf Fruit Trees for the Garden!

Have your own grown apples and pears fresh from little trees that fit in any garden. All the best varieties.

Whatever your needs for garden, orchard or home grounds—it will pay you to send to Green's for what you want.

Get Green's high quality, vigorous growing, big producing stock direct from the nursery at a big saving.

Liberal Cash Discounts
We pay transportation charges—see catalog
Sent C. O. D. if desired

Send To-day for Green's 1925 Catalog, FREE

Green's Nursery Co.
20211 Green Street, Rochester, N. Y.

Green's Catalog for 1925

from NURSERY to You

Creeping Bent

The wonder golf grass—now available for private lawns

EVERY golf player knows about Creeping Bent. Dozens of clubs have dug up long-established greens to replace them with this finest of grasses for close-knit, short-clipped, well cared for turf.

It is a luxury grass. It calls for constant care, five top dressings a year, frequent mowing. But for those willing and able to provide the needed care, it will repay as no other grass known. It makes a lawn like the lustrous oriental rugs that cover your polished floors.

Trampling feet do not hurt it. Terraces are held in place. Its close knit carpet chokes out weeds. Ever thicker it grows, each plant sending out runners which root themselves in the soil and become new plants. Its emerald hue delights the eye. Alien growth which would disturb the pattern is smothered out.

It is rare because seed is not available except as a trace mixed with other grasses. This prevented the widespred use of Creeping Bent. But the U. S. Department of Agriculture found a way out, discovered that the chopped roots and stolons of the plant were ideal to use for propagation.

A Fine Lawn in One Season

A fine lawn can be produced in one season. The supply of stolons is limited, but Vaughan's after several years have produced a supply of U. S. Government strains which can be sold for private use.

For $30.00 we will sell you enough stolons of grass to plant 1,000 square feet. We will furnish complete directions, and guarantee delivery to you in the best growing condition. A letter giving further information about Creeping Bent stolons will be sent on request.

Department 22
10 W. Randolph St., CHICAGO

Vaughan's Seed Store

Department 22
41-43 Barclay Street, NEW YORK

DAHLIAS

Schulz' Dahlia offering is unsurpassed. All grown on the Schulz Dahlia Farm. Plan to grow Dahlias next summer. In sun or shade, in sandy soil or heavy loam, these lovely flowers bloom to beautify and brighten the landscape. A wide range of colors give opportunity for wonderful combinations to the delight of all flower lovers.

Our 1925 catalog lists all varieties, rare and fine types for the most discriminating. Special prices on collections, also choicest Dahlia seeds.

Iris

Plant them as borders around ponds, along walks or drives. Iris offer to flower lovers more points of excellence than the Orchid. Beautiful shades, variegated colors delight the eye. We have a full and complete collection of the best types in German, tall and dwarf bearded; Japanese and Siberian types. Read about our new introductions listed in our 1925 catalog.

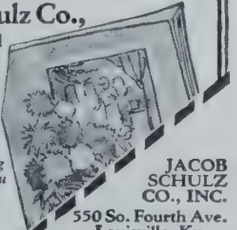
Peony

For late summer or fall Peonies are unsurpassed for borders along walks and drives or in beds for cut flowers they are the best as they keep longest in water. Plan now to beautify your house and garden next summer. Our list is extensive, offering many varieties at reasonable prices.

Gladiola

Gladiolas are particularly interesting to those planning their garden now. We offer to you a wonderful selection of these cheery flowers. They are easy to grow and are delightful for table or house decorations. Write for our handsomely illustrated catalog, showing our complete line of **Flowers, Ornamentals, Shrubs, Small Fruits** and Flower Seeds.

Jacob Schulz Co.,
Incorporated
550 South Fourth Ave.
LOUISVILLE, KENTUCKY



Our New Catalog is Ready for You Now!

JACOB SCHULZ CO., INC.
550 So. Fourth Ave.
Louisville, Ky.

Send for this FREE Catalog.

Gentlemen: Please send me your 1925 Catalog FREE.

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*Address*_____
*City*_____ *State*_____

Plant Success means Plant FEEDING

Health and Beauty for Your Plants

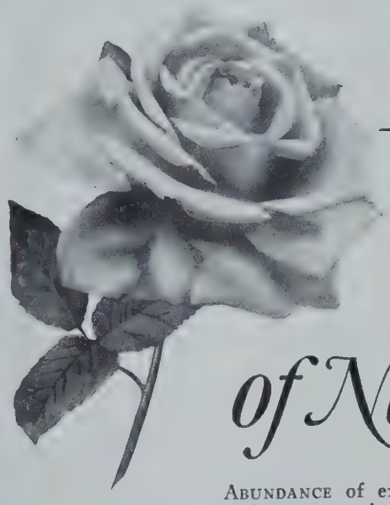
STADLER'S "Superior" Plant Food is *guaranteed*, when used according to instructions, to promote luxuriant bloom—intense, vivid colors—and vigorous growth on all house plants, bulb plants, roses, shrubs, lawns, vines, and trees.

It is the scientific, correctly balanced "tonic" or nourishment that plants need. Odorless and clean, entirely harmless. Try it and almost immediately you'll note its wonderful effects.

At your dealer's or if he cannot supply you send $1 (plus 10 cts postage) for a can of 600 treatments—enough for one year. Results *guaranteed*, or money refunded. Trial package 10 cts.

The Stadler Products Co.
953 Denison Ave., Cleveland, Ohio
Specialists in High Grade Fertilizer for 70 Years

Stadler's "Superior" PLANT FOOD



Roses of New Castle

ABUNDANCE of exquisite, fragrant and sturdy rose bushes grown in the famous New Castle soil will make true the rose garden of your dreams. Unexcelled in beauty of form and color, New Castle roses bloom continually and grow to perfection in any climate. Can be planted any time.

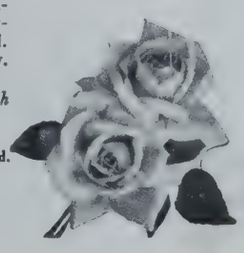
Every plant selected from the finest stock. All pot-grown, in full foliage, shipped safely everywhere, with soil on roots. Reasonable prices. All standard and many new varieties. Send for our

Rose Book for 1925—"Roses of New Castle"

Tells you how to make rose growing a success. The most complete book on rose culture ever published. Compiled from the lifetime study and experience of America's expert rose growers. Gives all information you need. Send a postal for your copy today. It's free.

"Increase your property value with beautiful roses."

HELLER BROS. CO.
Box 221 New Castle, Ind.



Jessie L. Seal

AMONG MY 1925 INTRODUCTIONS ARE:

ELINOR VANDERVEER —BEAUTIFUL ROSE PINK DECORATIVE.

OLIVE REED — IMMENSE YELLOW DECORATIVE.

Illustrated 1925 Catalogue

WITH PICTURES OF OUR GOLD MEDAL EXHIBIT AT DAHLIA SOCIETY OF CALIFORNIA SHOW AND FULL DESCRIPTIONS OF THE ABOVE DAHLIAS AND OTHER PRIZE WINNERS WILL BE SENT UPON REQUEST.

JESSIE L. SEAL
609 Third Avenue
San Francisco California

Originator and Introducer of Prize Winning Dahlias

Now is the time to plan that summer bungalow

HAVE you ever considered putting up a cozy summer bungalow, but have been dismayed by thoughts of cost of labor and materials? The Hodgson Plan has offered a solution to hundreds of families.

Hodgson Portable Houses are not only attractive in appearance, but they are practical. They are sturdy and weather-proof, and exceedingly comfortable. And they are low in price.

Hodgson Houses are made of red cedar, backed with heavy fibre lining. They are shipped to you in sections, painted, stained and finished to the smallest detail. Two men can erect a Hodgson House in one day's time—no skilled labor required. The only tool necessary is a hammer to wedge in the key-bolts which keep the sections absolutely rigid against the severest strain.

Send today for the Hodgson Catalog K. Look over the many attractive models and select the one best suited to your needs. Now is the time to place your order. Our catalog also contains prices and complete information about portable garages, play houses, dog kennels, poultry-houses, etc. Write for it today.

E. F. HODGSON CO.
71-73 Federal Street, Boston, Mass.
6 East 39th Street, New York City

HODGSON *Portable* HOUSES

HARDY BLUE DELPHINIUMS!

Two of the most remarkable and most beautiful Strains

PUDOR'S GLORY OF PUGET SOUND
WATKINS SAMUEL ENGLISH WREXHAM

Planting and seeding time is again approaching! My Delphinium booklet, beautifully illustrated, tells you all about the GROWING, CULTIVATION AND PROPAGATION of these charming, popular hardy plants. If interested send for your copy; it is free.

IRIS OF RARE FORM AND BEAUTY!

I am devoting 5 acres to the growing of about 250 OF THE WORLD'S BEST IRIS VARIETIES, not 400 or 500, which would be folly.

And What RHIZOMES This Climate and My Soil Produce!

A new, very comprehensive descriptive price list has just been issued; it is free to any Iris lover. My new large illustrated catalogue, really a valuable reference and text book, containing several valuable articles written by the world's foremost Iris breeders, and a complete color classification of 250 of the best new and old Iris varieties, will be sent on receipt of 25 cents, which amount you may deduct from your first $2.50 Iris order.

PUDOR'S SEED NOVELTIES FOR SPRING PLANTING

GEUM: Lady Stratheden (yellow). **G. Borisii** (large orange-red). New English **Hybrid Lupins** in the most wonderful colors (Downer's, Elliott's and Harkins') **VISCARIA. DELPHINIUM ZALIL** (yellow). The new English Sensation **DAHLIA, COLTNESS GEM**—a new dwarf bedding Dahlia of wonderful garden value, rivals the popular Geranium; and many other rare and unusual seeds.

"I only grow the Finest and Best Things for the Garden — yours and mine."

O. M. PUDOR'S
Iris and Hardy Plant Gardens
Specialty Grower and Breeder of Superfine Iris and Delphiniums
Puyallup, R. F. D., Washington, (State)

You Can Easily Grow Our GIANT WASHINGTON ASPARAGUS

Cut It Next Year

Our wonderful Giant Washington Asparagus is ideal for the home garden. It is easy to grow, hardy and rust-resistant. It is the culmination of years of intensive expert development, free from fiber, unusually tender and palatable. It commands top prices everywhere. Last year New York markets paid us $15 per dozen bunches. Stalks are amazingly large (1″ to 2″ in diameter)—8 stalks to the bunch.

A planting of our Giant Roots made this Spring will insure your cutting Asparagus next year. A packet of seeds, or 50 roots, will plant three rows 50-feet long—more than ample for the requirements of the average family.

SEED PACKET (Very Specially Selected Seeds) $1.00
50 GIANT ROOTS $5.00 25 GIANT ROOTS $3.00
Cultural directions included—by parcel post, prepaid, anywhere.

Write to-day for descriptive booklet—free. An attractive proposition is offered to Commercial Growers.

RIVERVIEW FARMS
Box 255 Bridgeton, N. J.

FLOWER—GRASS VEGETABLE SEEDS

YOUR 1925 Garden will be an assured success if you plant Waterer's Seeds, selected from the finest stocks in Europe and America. They have produced results for over thirty years.

Two Big Special Offerings

$2.00 Collection Vegetable Seeds

1 package each of Early Beet, Late Beet, Carrot, Onion, Parsnip, Early Radish, Late Radish, Turnip, Swiss Chard, Boston Lettuce, Summer Lettuce, Parsley, Green Bean, Wax Bean, Pole Lima, Early Corn, Late Corn, Cucumber, Squash, Bloomdale Spinach, Tomato, Cabbage, New Zealand Spinach.

All the Finest Strains—Total Value $2.75.

$1.00 Collection Flower Seeds

1 package each of Alyssum, Asters, Golden Wave, Giant Cosmos, California Poppy, Strawflower, Larkspur, Mignonette, Dwarf Nasturtium, Shirley Poppy, Giant Zinnias, Scabiosa, Mixed Balsam.

Very Choice Stocks Value $1.50

Send to-day for free catalogue

HOSEA WATERER
624 Chestnut St. Phila., Pa.
Established 1892

HOSEA WATERER · PHILADELPHIA ·

DAZZLING DAHLIAS

Healthy, vigorous, eager Bulbs and Plants of more than a hundred of the very finest varieties. You'll buy some—you'll want all!

Amun Ra, Ambassador, Bonnie Brae, Champagne, Gay Paree, Mariposa, Papillon, U. S. A., Bashful Giant, Isabel Street, Laddie, Lotus, Pride of San Francisco, Mae Frefe, Rhododendron, Wizard of Oz are fully described, with scores of others, in—

The Handsomest Catalogue of the Year—FREE

Many of the illustrations in full color.

Send 20c (in one-cent stamps or two dimes) and receive at planting time Bulb of an improved dahlia.

GREENSBORO FARMS
Greensboro Maryland
Floral division of Greensboro Farms 1500 acres in varied cultivation

SUBSTANCE · FORM · AND · COLOR

THE COMPLETE ARCHITECTURAL MATERIAL

Concrete, made with Atlas, permanently repeats the glory that was Greece

THE Parthenon, gem of Athens' Acropolis, has been reproduced accurately in Nashville, Tennessee. Not a crumbling ruin greets the tourist today, but the complete structure, its marvelous symmetry fittingly enhanced by its original *color.* For with Atlas White Portland Cement not only the shining columns, but the rich panels back of the frieze figures, the intricate sculpturings themselves, the delicate shadings in the cornices, the whole splendid coloration of that ancient Parthenon has been reproduced *permanently,* an achievement which without concrete would have been financially impossible. Such structures of permanent beauty are now an economic possibility in any community, for through Atlas, Portland Cement is today the cheapest of all manufactured products.

To concrete's substance, its strength and permanence, to its adaptability for all forms of construction, to its economy now is added this achievement of abundant and permanent color.

And just as Atlas, by developing the rotary kiln, made possible a high standard of quality, made possible quantity production, made Portland Cement actually cheaper today than it was a third of a century ago—so, with Atlas, has this new beauty of concrete become an accomplished fact.

The architect, the contractor, the home builder, have now available in Atlas Portland Cement, obtainable either in the usual gray color or a pure white, the complete architectural medium — permanent, adaptable, economical and beautiful, "the Standard by which all other makes are measured."

Between the Atlas plants and the user there is but one distributor—the building material dealer—who brings Atlas to the public cheaper than by any other method. Any architect, contractor or prospective builder is invited to write this Company regarding the possibilities of concrete, made with Atlas.

Atlas
Portland Cement

The ATLAS Portland Cement Company

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CHICAGO BIRMINGHAM INDEPENDENCE, KANS.
PHILADELPHIA BOSTON ST. LOUIS DES MOINES DAYTON OMAHA
BUFFALO KANSAS CITY JACKSONVILLE, FLA.

Atlas White
Portland Cement

Reproduction from a painting of the estate of R. R. Colgate, Sharon, Conn., by Frank Swift Chase

© The D. T. E. Co., Inc., 1925

$1,250,000.00 business in saving trees during 1924 by The Davey Tree Expert Co.

An increase of 25% over 1923

In 1906 the business of The Davey Tree Expert Company was approximately $10,000.00, with John Davey in personal charge training his men in his wonderful new science. In 1924 the business reached a total of $1,250,000.00 for the year.

In 1906 John Davey had only a dozen men—today the Davey organization numbers more than 500 and is national in scope.

During 1924 The Davey Tree Expert Company treated in this one year more than 98,000 trees—for more than 6,000 clients between Boston and Kansas City and in California.

Of these clients 75% paid the Davey Company less than $200 each. The smallest amount paid by any one client was 90c—the largest was $15,528.62.

These clients include owners of private homes and country estates; schools, colleges and universities; city parks, golf and country clubs; churches, hospitals and philanthropic homes; cemeteries; federal, state and county institutions; manufacturing and insurance companies, and other corporations.

This business was founded on the genius, love and courage of John Davey, who gave to the world the wonderful Science of Tree Surgery. It was organized, built up and managed by his son, Martin L. Davey, with the co-operation of a group of unusual men. The Davey organization today is made up of men of such high personal qualities, ability and integrity that John Davey's slogan has become a living force, "Do it right or not at all."

Among prominent persons and institutions served by Davey Tree Surgeons are the following:

CITY OF LOUISVILLE
HON. ABRAM I. ELKUS
JAMES A. FARRELL
WILLIAM HODGE
HON. HERBERT C. HOOVER
IDLEWILD COUNTRY CLUB
CLARENCE BUDDINGTON KELLAND
UNION COLLEGE
MRS. C. A. WEYERHAEUSER
T. EDSON WHITE

JOHN DAVEY
Father of Tree Surgery
Reg. U. S. Pat. Off.

Attach this coupon to your letterhead and mail today

The Davey Tree Expert Co., Inc.
City Bank Bldg.
Kent, Ohio

Gentlemen: Without cost or obligation on my part, please have your local representative examine my trees and advise me as to their condition and needs.

THE DAVEY TREE EXPERT CO., Inc., 40 City Bank Bldg., Kent, Ohio

Branch offices with telephone connections: New York, 501 Fifth Ave., Telephone Murray Hill 1629; Albany, Volckert Bldg.; Boston, Massachusetts Trust Bldg.; Philadelphia, Land Title Bldg.; Baltimore, American Bldg.; Pittsburgh, 331 Fourth Ave.; Buffalo, 110 Franklin Street; Cleveland, Hippodrome Bldg.; Detroit, General Motors Bldg.; Cincinnati, Mercantile Library Bldg.; Louisville, Todd Bldg.; Indianapolis, Lombard Bldg.; Chicago, Westminster Bldg.; St. Louis, Arcade Bldg.; Kansas City, Scarritt Bldg.; Minneapolis, 636 Andrus Building.

DAVEY TREE SURGEONS

Every real Davey Tree Surgeon is in the employ of The Davey Tree Expert Co., Inc., and the public is cautioned against those falsely representing themselves. An agreement made with the Davey Company and not with an individual is certain evidence of genuineness. Protect yourself from impostors. If anyone solicits the care of your trees who is not directly in our employ, and claims to be a Davey man, write headquarters for his record. Save yourself from loss and your trees from harm

Wouldn't You Love

To pick roses in winter?

Just think how much you would enjoy a flower garden this winter—when nearly everyone's garden is covered with snow!

Wouldn't it be worth the insignificant cost of a Callahan Greenhouse to revel in the fragrance of your favorite blooms—to have their bright faces adorn your table—to carry thoughts of love and sympathy to your dearest friends?

Callahan Greenhouses

A Callahan Unit-Built Greenhouse can be erected easily and quickly, even in winter. It is shipped in units, painted, with glass all in, hardware attached, ready for quick assembly.

Write for the Greenhouse Book and complete price list.

The T. J. Callahan Co.
702 Stout St. **Dayton, Ohio**

A Water Garden Appeals to All

There's more real joy in growing Waterlilies than in almost any other kind of gardening. Every morning brings surprises as fresh and new as the dawn. The mid-day sun only increases the shadings of delicate pink, of pale lavender, royal purple and rich crimson. And Waterlilies are grown as easily as the most common flowers in the most common garden. All you need is a tub or pool of water and a little soil—Mother Nature gives the sunshine that brings out the loveliness of the flowers.

My New Catalogue of Waterlilies

will show you how to build a pool, tell you what varieties are most satisfactory, and picture for you in natural colors some of the most beautiful Waterlilies. The booklet will supply all the information you need to make your garden an uncommon garden. Send to-day for a free copy of this new edition.

WILLIAM TRICKER
661 Forest Street **Arlington, New Jersey**

Dahlias

Look for our Trade Mark when looking for quality

For over a third of a century our Trade Mark has stood for quality and fair dealing. Stock true to name, strong and free from disease, some wonderful novelties for 1925. Catalogue free.

W. W. WILMORE
Box 382 **Denver, Colorado**

World's Best DAHLIAS

and the largest collection in the U. S. A.

Vigorous, healthy tubers grown without irrigation or forcing. We have all the best new and standard varieties to offer

Catalogue free

INDIANA DAHLIA FARM
New Albany **Indiana**

Do You Like Strawberry Short Cake

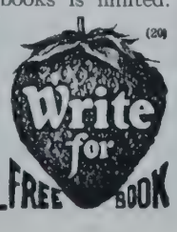
Sure you do! But—you'll never really know how good strawberry shortcake can be until you have your own strawberry garden and can have the berries fresh from the vine. Our famous book written by the world's greatest strawberry expert tells how you can have a June to November crop of big, fancy, delicious strawberries to enjoy in your home and to sell for a big profit as well.

For a limited time this great book, 1925 improved edition, is being sent postpaid absolutely free.

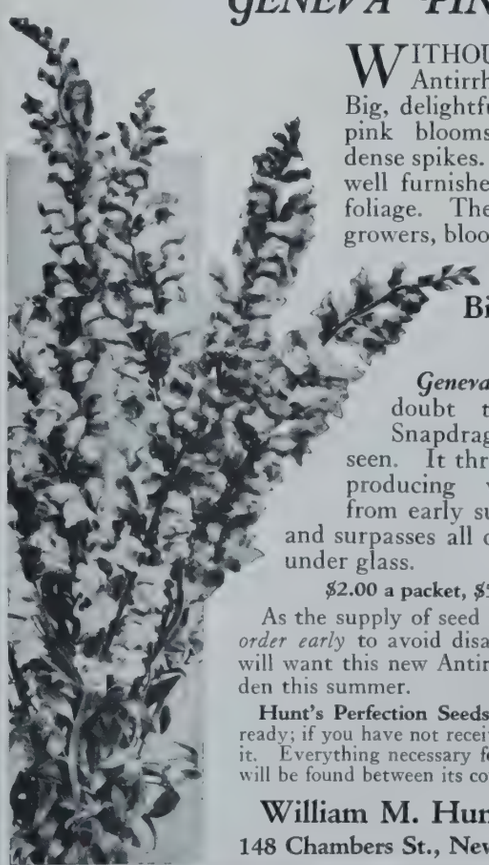
Send for it at once and take advantage of our special bargain prices on Seven Kellogg Thorobred Strawberry Gardens. There is one for every need and every purse.

Book also tells about Kellogg's raspberries, blackberries and grapes. Our supply of books is limited. Send for your copy now. (20)

R. M. Kellogg Company
Box 2520
Three Rivers, Mich.



A Wonderful New Snapdragon "GENEVA PINK"



WITHOUT a rival among Antirrhinums, old or new. Big, delightful, glistening rose-pink blooms borne in long, dense spikes. Long, stiff stems, well furnished with dark green foliage. The plants are robust growers, blooming with remarkable freedom.

Big Spikes Outdoors

Geneva Pink is without doubt the most superb Snapdragon we have ever seen. It thrives in the garden, producing wonderful spikes from early summer until frost, and surpasses all others when grown under glass.

$2.00 a packet, $5.00 for 3 packets

As the supply of seed is limited *place your order early* to avoid disappointment, for you will want this new Antirrhinum in your garden this summer.

Hunt's Perfection Seeds, our new catalogue, is ready; if you have not received your copy, send for it. Everything necessary for the complete garden will be found between its covers.

William M. Hunt & Co., Inc.
148 Chambers St., New York City, N. Y.

The New STAYTITE Handle Identifies P. Q. Lawn Mowers

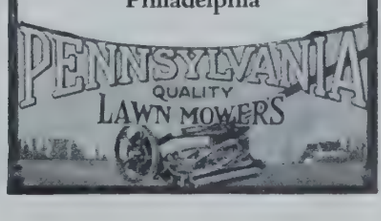
How To Tell A Good Mower

Quickest and surest way is to look for a STAYTITE Handle. It is on all PENNSYLVANIA Quality Lawn Mowers and no others. Their long life makes them the most economical in the end.

At Hardware and Seed Stores

Send for booklet *"How to Have a Fine Lawn"*

PENNSYLVANIA Lawn Mower Works
1635 North 23rd Street
Philadelphia



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SPECIAL OFFER Right now a special offer is being made. With this De Luxe Plan Book you receive a year's subscription to Keith's Magazine, the recognized authority on home building for twenty-five years. Just send your name and address, and pay the postman only $3 plus a few cents postage upon arrival. Write at once.

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BARTLETT TRIMMERS
Save the Trees
PRUNING MADE EASY

There is no task to tree trimming when you use a Bartlett Jointed Compound Lever Pruner—because it is jointed. The Bartlett comes in four foot sections that can be easily and quickly locked together to give you a trimmer of the desired length. With a Bartlett Jointed Trimmer you can reach high limbs without using a ladder and you can always snip the low branches from the proper angle.

The cutting end has a COMPOUND LEVER that will cut with ease branches up to 1¼ inches in diameter. The blades are made of crucible tool steel and only the best materials are used throughout.

Expert horticulturists everywhere endorse the Bartlett Tree Trimmer.

We also furnish this tree trimmer with one piece pole if desired, as well as making a complete line of Hand Pruners, Lopping Shears, Pruning Saws and other fine cutting tools.

Prices of Jointed Pruner

8 ft. 2 sections wt.—5 lbs. . .	$4.20
12 ft. 3 sections wt.—7 lbs. . .	4.50
16 ft. 4 sections wt.—9 lbs. . .	4.80

Remember the Jointed Pole requires only 4 feet of space for storage.

Above prices F. O. B. Detroit. Include postage if shipment is desired by parcel post.

Write for catalogue

BARTLETT Manufacturing Co.
439 E. Lafayette Ave.
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Fruit Trees and Berry Plants

As our prices are more attractive than any advertisement we might write we are quoting some of them here.

	Each	*Ten*	*Hundred*
McIntosh Apple 5 to 7 ft. trees	$ .75	$6.50	$55.00
Bartlett Pear 5 to 7 ft. trees	1.00	9.00	80.00
Montmorency Cherry 5 to 7 ft. trees	1.00	9.00	80.00
Abundance Plum 5 to 7 ft. trees	1.00	9.00	80.00
Elberta Peach 4 to 6 ft. trees	.50	4.00	30.00

Herbert Red Raspberry $1.00 per dozen, $5.00 per 100
Plum Farmer Black Raspberry .75 per dozen, $3.00 per 100
Blowers Blackberry $1.00 per dozen $5.00 per 100
Worden Grape 2 year No. 1 plants 25c. each, $2.00 per 10
Martha Washington Asparagus 2 year roots $2.00 per 100

And all prices subject to 10% *discount* if we receive your order before March 1st.

We have the most complete line of Fruit Trees, Berry Plants, Shade Trees, Evergreens, Shrubs, Vines and Perennials in Northern New England and our stock is unexcelled as to quality and hardiness. May we send you our catalog?

GEO. D. AIKEN PUTNEY, VERMONT
"Grown in Vermont, it's Hardy"

The Newer Shades in Roses

Such as Coral, Old Gold, Saffron Yellow, Terra Cotta and Oriental Red are obtained by planting Pernetiana Roses, and these roses are *only a success* when budded upon Rosamine Stock. This distinction is quite noticeable in the rose Los Angeles which proves a failure when budded upon any other stock.

We submit, therefore, that this discrimination is a *great advance* and a *most important* factor in producing the popular colors so much in demand at the present day, and up to the present has not been appreciated by the rose growing public. Our Hybrid Tea and Perpetual Rose are budded upon Multiflora and Manetti Stock.

Hardness of wood is essential, as soft wooded roses die back badly when set out. Our plants have well ripened wood. Nowhere can you buy stronger plants.

May we Send You Our Catalogue?

It is different, as we do not pass along the description of the Hybridists as the roses grow in Europe but as they grow in our Nursery, always stating defects as well as merits.

ROBERT EVANS HUGHES
ROSE SPECIALIST
Near Buffalo Williamsville, N. Y.

G&R ROSES

On their own roots. Sure to bloom. True to name.

RAINBOW COLLECTION

5 Wonderful Roses. Different Colors. Sure to please. **HELEN GOOD, pink; PRESIDENT WILSON, rose; HOOSIER BEAUTY, crimson; MRS. AARON WARD, yellow; WHITE LA FRANCE, white. Mailed Postpaid** to any address. Guaranteed to reach you in good growing condition..... **$1**

SPECIAL OFFERS

6 Hardy Chrysanthemums, embracing all colors.....	$1.00
6 Gladioli—Cream of newer sorts, selected colors.....	1.00
6 Liberty Iris—Choice colors—assorted.....	1.00
3 Decorative Ferns—Assorted varieties.....	1.00
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4 Perennials—Made up of **1 Delphinium, 1 Shasta Daisy, 1 Foxglove, 1 Aquilegia**.....	$1.00

Special Offer—Any 5 collections for **$4.50**—the 8 for **$6.50** postpaid. Prompt service guaranteed. Catalogue free.

THE GOOD & REESE CO. **Dept. 703** **SPRINGFIELD OHIO**
Largest Rose Growers in the World

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Better-Bred Bulbs

The Best 100 GLADIOLI

Out of 1200 varieties of Named Gladioli, introduced by the leading Hybridists of two continents, only 175 varieties have shown sufficient merit (after careful testing over a period of 10 years in our North River Farms) to be worthy of mention in a very beautiful book we have just published entitled "The World's Best Gladioli." Only one hundred of these kinds are considered XXXX varieties, our symbol of extreme beauty and perfection of form. All are minutely described, from our own field notes, with many beautiful illustrations.

If you love *"the better Gladioli"* you'll find them all in this book, which we shall be glad to mail, free of charge.

NORTH RIVER FARMS
"The Home of the World's Best Gladioli"
Marshfield, Box G, Massachusetts

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Avoid Substitutes
Use only the original

Colonial
HEAD-THROAT AND DAMPER

No smoking, perfect draft control, insures correct construction of the fireplace throat—the most vital part.

With the Colonial Head and our Free plans you can be sure your contractor will build right. Write for FREE book. Also blue-print showing common mistakes in fireplaces.

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Alsomanufacturers of Complete Fireplaces, Dampers, Grates, Andirons, Screen, Fenders, Hoods, Firesets, etc.
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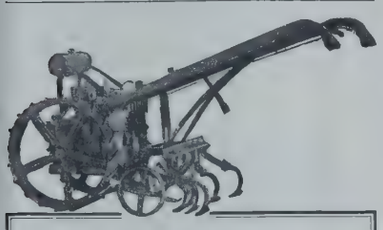
The Alling Dahlias

Were awarded a Gold Medal at the Big New York Show of the American Dahlia Society, September 1924. Is this not sufficient guarantee that they are worthy of a place in your garden?

Write for my 1925 Catalogue. A carefully arranged list of The World's Most Select Dahlias. Stocks free from stunted or diseased plants.

C. Louis Alling
Dahlia Specialist
251 Court Street, West Haven, Conn.



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Takes care of every need for the

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because it

cultivates
seeds
mowes
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fertilizes

Simple and easy to operate. Economical and dependable.

Send for free catalogue of the new improved 1925 Acme-Jr.

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COWEE'S "MEADOWVALE" GROWN GLADIOLI

are conceded throughout the country to be of the *strongest vitality possible*, thereby producing *superior results*, even under adverse conditions. Why then buy of inexperienced Growers even at cut prices?

Just demonstrate the truth of the above by planting some bulbs of *"Cowee's Scarlet Wonder,"* a more *brilliant* or *larger flowering variety* is yet to be produced. This, too, is only one of many fine varieties and collections grown here. Write for Price List, which is free.

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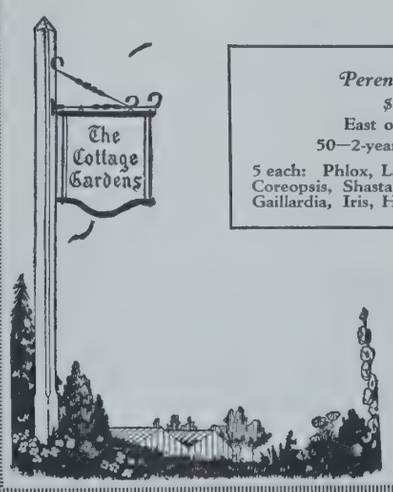
The Cottage Gardens

"A Nursery You Can Depend Upon"

Lansing, Mich.

Growers of
A Complete Line of Hardy Plants



Perennial Collection A
$10.00 Prepaid
East of Rocky Mountains
50—2-year-old field grown plants
5 each: Phlox, Larkspur, Columbine, Hibiscus, Coreopsis, Shasta Daisies, Pyrethrum Roseum, Gaillardia, Iris, Hardy Pinks. Spring Delivery.

1925 Annual
Soon Ready
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BENT LAWNS—Like Putting Greens!

The development on Creeping Bent has revolutionized standards in lawn-making. This splendid lawn-grass produces wonderful rich, velvety greensward. In years to come the better lawns will be Bent lawns.

Write us today about our special Bent Mixture and information on the use of Creeping Bent Stolons—the triumph of the decade in fine lawn-making.

This is the time to plan your lawns, send your measurements and we will gladly furnish estimate. Also write for instructive booklet "Bent Lawns".

O. M. SCOTT & SONS CO., 51 Eight St., Marysville, Ohio

You Can't Buy Blueberries Like These

You Must Grow Them Yourself

—and it's easy if you get the real nursery grown Blueberry plants. Yes, old fashioned Blueberries—just like Dad had on his "old farm down East." The joy of growing, picking, and eating Blueberries from your own land—the pride of offering them to your guests—only those who know it can appreciate.

The Mayo Nurseries offer sturdy Blueberry plants grown in the heart of the Berkshire Hills. They are hardy, rapid growers, and heavy yielders, bearing usually the first year—not the ordinary small, seedy huckleberry but large, full fleshed *Blueberries* that taste—well, *delicious*.

A corner of your ground can be filled with Blueberry bushes, a pleasing spectacle with their brilliant foliage reddening the landscape till late frost.

Plant "Bearing Age" Fruit Trees and Berry Plants for quick results!

Raspberries — Yellow, Red, and Black — New varieties that a few words cannot attempt to describe.

Currants—on charming little trees—an ornamental novelty that will yield heaps of clean, delicious red fruit.

Grapes— Extra Fine Bearing Vines with heavy root systems and fruiting canes for quick results.

Fruit Trees — Peaches, Pears, Cherries, Plums, Apples, and Quinces with wonderfully developed fibrous root-systems. Well grown Trees—soon to bear fruit.

To Harvest the finest Fruit Plant the Finest Stock!

Our New Spring Fruit and Berry Catalog

Beautifully illustrated in colors is now ready for gratuitous distribution. Write for it.

This catalog offers a selection of fruit trees and berry bushes proven to be the most satisfactory because of their hardiness against climatic changes, prolific yielding, delightful quality of fruit and early bearing.

Mayo Nurseries, Inc.
Nurserymen and Landscape Architects
911 Ellwanger & Barry Building
Rochester, N. Y.

KINKADE
Garden Tractor and Power Lawnmower

A Practical, Proven, Power Cultivator for Gardeners, Suburbanites, Large Estates, Florists, Truckers, Nurserymen, Berry and Fruit Growers—Simple, Compact, Easily Handled and Powerful.

LAWNMOWING FEATURE

Easily equipped in five minutes for Power Lawnmowing work, —31 inch heavy duty, steel mower cuts ¾ acre per hour. A decided time saver on large lawns, golf clubs, cemeteries, City Parks, etc.

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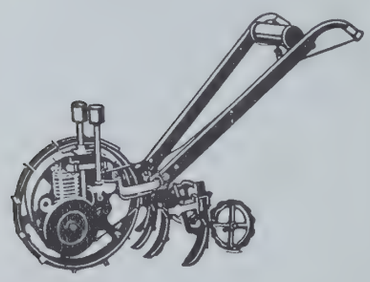

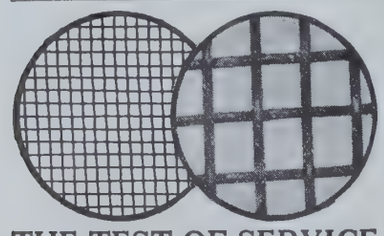

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These unretouched photographs show Jersey Copper Screen Cloth heavy grade, which has been subjected to the salt air for more than twelve years. The four-diameter enlargement at the right is proof of the durability of Jersey Copper Screen Cloth.

THE NEW JERSEY WIRE CLOTH COMPANY
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Copper Screen Cloth
Made of Copper 99.8% Pure

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C. C. Morse & Co. do *no retail* business east of the Rocky Mountains. Our recent ad was intended only for the Pacific Coast readers of the *Garden Magazine*.

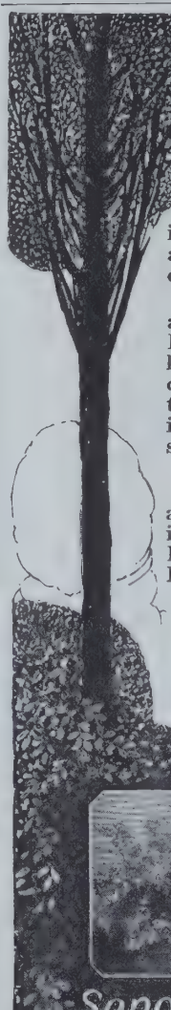
C. C. Morse & Company's Sweet Pea and Garden Seed Specialties can be obtained only from the leading Seed Houses throughout the country.

Special $1.00 Flower Offers

8 Hardy CHRYSANTHEMUMS—all colors	$1.00
25 Gladioli—Cream of newer sorts	1.00
6 Dahlias—Grand assortment	1.00
8 Liberty Iris—choice colors labeled	1.00
10 CANNAS—assorted colors	1.00
10 HARDY PLANTS—each labeled	1.00

The 6 collections mailed postpaid for $5.00
Catalogue free

Roseside Gardens Nursery
Warwick Pennsylvania



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The catalog is illustrated from actual photographs and shows many of the varieties in their natural colors. In addition each variety is fully described so you will have no difficulty in selecting just what you need. The catalog also gives definite, but simple, planting directions, so anyone can plant Maloney stock, and then it is bound to grow on account of the wonderful root system Maloney scientific culture has developed.

Send for the Free Catalog Today

and see how easy and inexpensive it is to beautify and increase the value of your home with Maloney stock. Have the satisfaction of doing your own planting. Remember everything you order is positively guaranteed in every way and you can have your money back if not satisfied.

It will pay you to send for the catalog today and place your order early for spring shipment.

We prepay transportation charges. See catalog.

Maloney Bros. Nursery Co., Inc.
34 Main St., Dansville, N. Y.

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Finest Field Grown
Dahlias

Direct from a dahlia lovers' garden to you at very reasonable prices.

Write for descriptive circular.

The Village Dahlia Gardens
Saylesville, R. I.

Evergreen and Deciduous Trees and Shrubs

Hardy Herbaceous Plants
The old-fashioned flowers for the Perennial Garden
Collections at Special Prices

Climbing and Bush Roses

Vines–Small Fruits–Fruit Trees

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The Richest Soil in the U. S. Provides—

1. The Fine Root Systems.
2. High Transplanting Value.
3. Growth-compelling Vigor.
4. Wonderful Beauty of

Barr's "Will Grow" Plants

Our new catalogue "How, When, Where and What to Plant" lists Evergreens, Trees, Shrubs and Perennials especially adapted to New York, Pennsylvania, New Jersey, Delaware, Maryland, Ohio, the Virginias and District of Columbia. This book will be sent free to any address in these states; *elsewhere on receipt of 25c.*

Send for your copy today

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"In the Garden Spot of America"
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Jumbo Strawberry

Wonderful new variety—bears until very late

Jumbo Strawberry yields great crops of very large fine-flavored fruit after other varieties are gone. Shipments have sold at $1.00 a quart wholesale in New York. Perfect. Trial Offer 10 Plants, $1.00; 25 Plants, $2.00; 100 Plants, $6.00; 1,000 Plants, $50.00

Redpath Red Raspberry

Beautiful brilliant red (not purple). Fruits in Fall of first year. From ½ acre of Plants set in April, we picked 300 qts. the following Fall. Second season, the Redpath bears heavily in mid-summer. Firm and a good shipper. Absolutely hardy. Trial Offer 5 Plants, $1.00; 25 Plants, $3.50; 100 Plants $12.00; 1,000 Plants, $100.

CATALOGUE FREE. Pictures and describes Strawberries, Raspberries and material for every planting need.

L. J. FARMER, Box 248, Pulaski, N. Y.

Redpath Raspberry

GRAPE VINES

All the standard varieties for vineyards and home gardens. Large stock of Concord, the best black grape. Vigorous roots; guaranteed true. Asparagus, currants, gooseberries and small fruit plants. Established 58 years. Send for our grape Catalogue. FREE.

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Dahlia TRENTONIAN

Gold Medal DAHLIAS

Among the many Notable Dahlias raised at our Famous Sanhican Gardens, *TRENTONIAN* is probably the greatest of them all. Its size, form and fascinating color practically won the *Gold Medal* for our memorable display at the great New York Show, 1924. Old gold, amber and bronze blended to the shade of an "Indian's skin"—most uncommon! Most fascinating! Such is the color of this magnificent Dahlia.

If you love good Dahlias, *Sanhican Gardens* can supply you with the sturdiest young plants, or vigorous, plump tubers—grown the way we grow our prize winning stocks.

Our new catalogue, leading authoritative book on "The World's Best Dahlias," free on request.

FISHER and MASSON
Dahlia Specialists
"Sanhican Gardens"
Box G Trenton, N. J.

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FERTILIZER DISTRIBUTOR

Should be standard equipment in every lawn and garden tool outfit. Distributes perfectly. Has adjustable feed control, sowing range 50 lbs. up to 3 tons per acre. Made from heavy sheet metal, working parts wrought steel. Weight only 40 lbs. Ratchet driven. Easily operated. Wonderful convenience for home gardener. A money maker for the landscape gardener who does contract work. Indispensable for the market gardener. Send for circular and prices.

Theodore Hofmann Greenford, Ohio

SAGAMORE IN COLOR

If you want to see this great Dahlia in color, send for our 1925 List.

Sagamore won at American Dahlia Society shows:

Best Seedling 1921

Best 2 Year Old Seedling 1922

Darnell Cup 1923
for Perfection and Keeping Qualities

See Editorial Comments, page 240, December *Garden*, also Comments on **Miss New York, Merveilleux,** both illustrated in our 1925 List.

BADETTY BROS.
Huntington Dahlia Gardens
Huntington Long Island, N.Y.

SCHOOL of HORTICULTURE
For Women

A SCHOOL OF COUNTRY LIFE

Modeled after the famous English Colleges of Gardening, Courses include Floriculture, Fruit Growing, Bees, Soils, Landscape Gardening, Botany, Poultry, Farm Crops and many others.

Splendid opportunities open to graduates. Two year Diploma Course and Short Spring Courses begin March 10th. For Catalogue, address, Miss Louise Carter, Director, Box A, Ambler Pennsylvania.

18 miles from Philadelphia

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The Insecticide Supreme

For your Flower and Vegetable garden, Evergreens, etc.
For Box Mite, Rose Bugs, Lace Fly, Spruce Gall, Red Spider, Aphis, Thrip and other insects.
Recommended by the Officers of the Garden Club of America.
Write for circular.

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1 gallon $3.00 **5 gallons $10.00**

Andrew Wilson INC.

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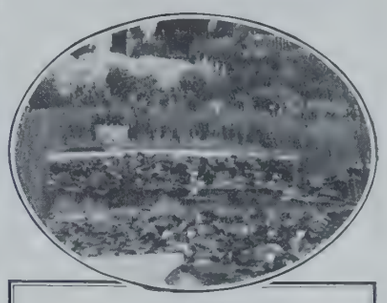
Direct to Buyer

Felstone!
the more Beautiful
GARDEN FURNITURE

FELSTONE *is a richly handsome and durable synthetic stone compounded of white Portland Cement, white crystals (instead of ordinary sand) crushed white marble and black stone crystals fashioned in charming styles and designs.*

Catalogue on Request

The FELSTONE COMPANY Inc
Biltmore - North Carolina



Complete Pool for $5.00
Express Prepaid

I will supply plants to fill a pool completely, *Express Prepaid*, to any place in the U. S., on receipt of $5.00. The plants sent are all among the best *standard varieties*, as follows:

1 White Water Lily (Alba candidissima)	$1.00
1 Pink Water Lily (Gracilis rosea)	2.00
1 Yellow or blue (choice of either)	2.00
1 Water Hawthorn	.50
1 " Poppy	.15
1 Porcupine Plant	.25
1 Parrot Feather	.15

All blooming plants, Pink or blue are tropical varieties, white and yellow are hardy varieties.

HARRY JOHNSON
Hynes California

The Cole Nursery Co.

has, since 1881, specialized in

"Everything That's Good and Hardy"

in ornamental shrubs, trees, both deciduous and evergreen, as well as hardy perennials.

Our free catalogue is the index to our 500 acres of nursery stock. Ready for mailing about February 1st, we will be glad to have you write for it promptly to

Painesville, Ohio

California's Finest Dahlias

Our Dahlia tubers tell their own story—they are so beautifully clean and plump.

Write us and we will tell you how we grow them so.

Our 1925 List will be sent upon request.

LESLIE E. DOOLITTLE
Del Monte California

Irises—
Peonies—
Gladioli

We Grow the World's Finest

Send To-day for Our
Free 1925 Catalogue

RAINBOW GARDENS
Farmington Minnesota

THE WORLD'S
Selected Dahlia
Creations

INCLUDING
ELITE BEAUTY
JERSEY SUNSET AND
CALIFORNIA SUNSET

OUR PRICES WILL INTEREST YOU
DAHLIA SEED A SPECIALTY
WRITE FOR LIST

ELITE DAHLIA FARM
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WATERLILIES
For Small Gardens

A little water, a little earth, and even less attention; so easy you will be surprised, for Lilies thrive in tubs or pools.

Send for our Free Catalogue with colored illustrations, describing fragrant day and night blooming Waterlilies; and how to grow them.

INDEPENDENCE NURSERIES CO.
Box M. Independence, Ohio

Now For
Real Garden Values

Japanese Barberry, fine 3 yr. plants; 12 for $2.50; 50 for $8.00; 100 for $15.00.

Heavy 2 feet, 2 yr. Cal. Privet, 25 for $3.00; 100 for $10.00.

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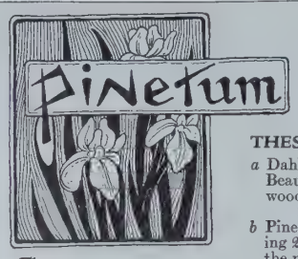

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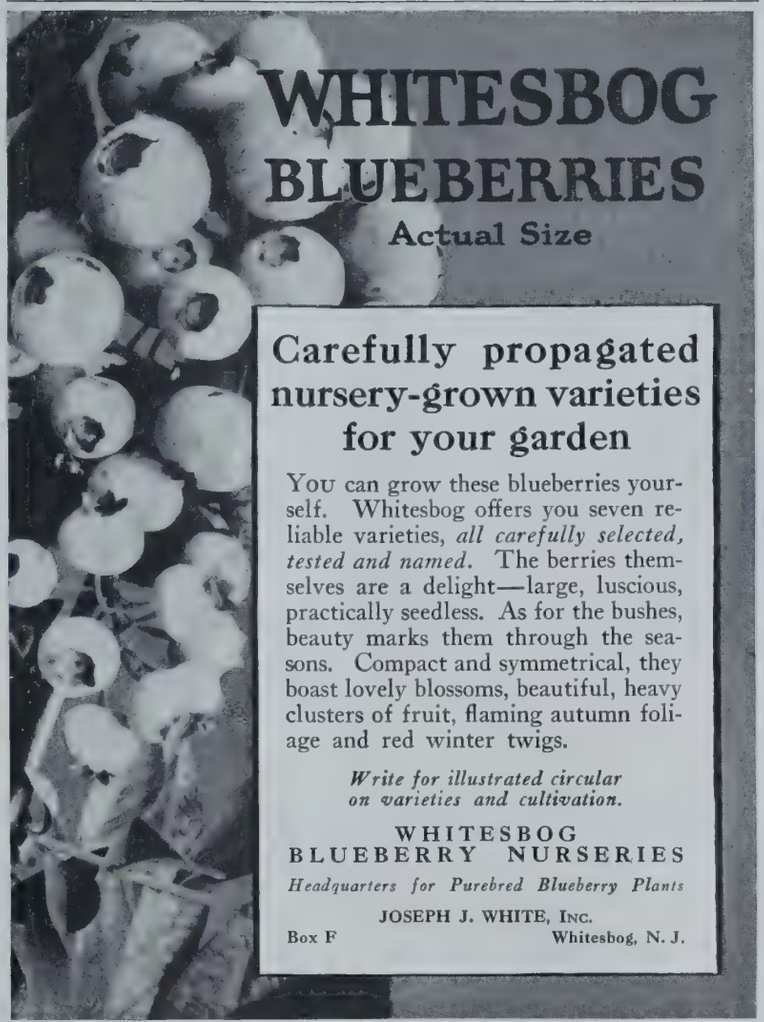

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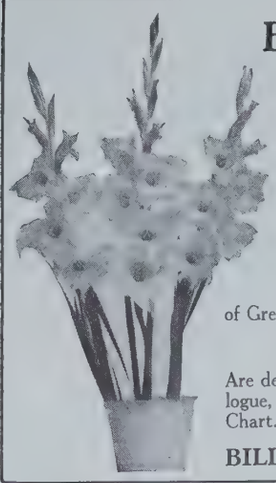

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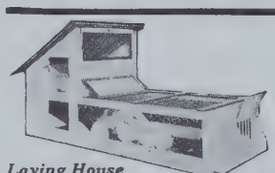

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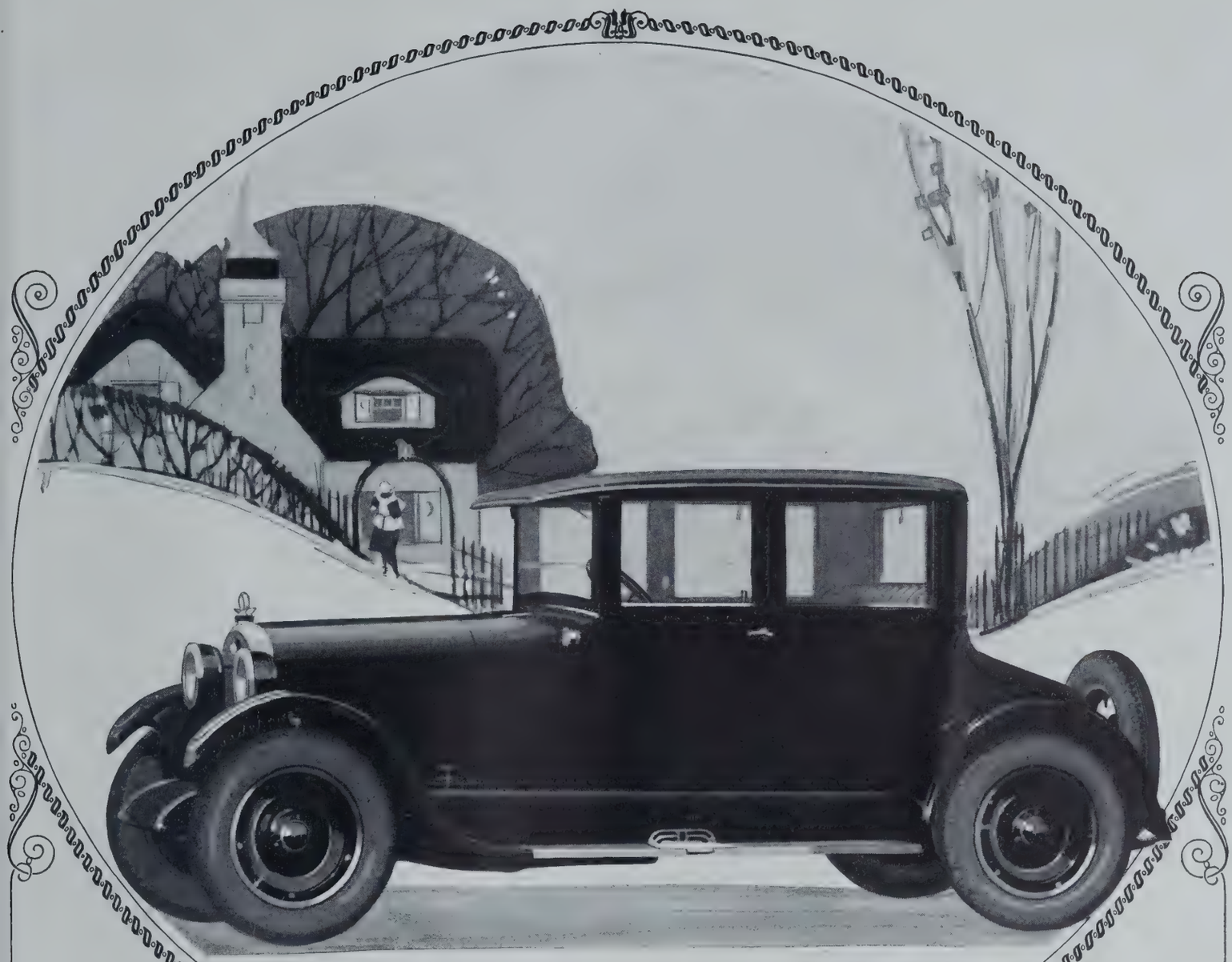

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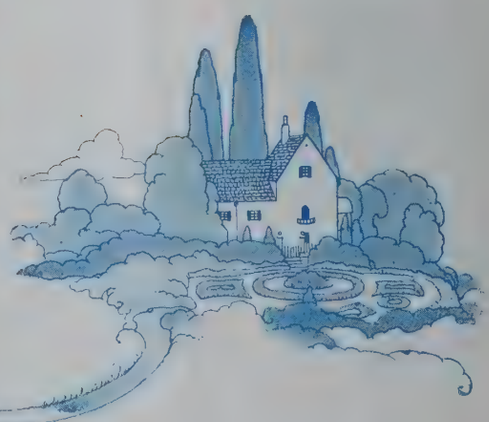

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